Wisconsin Behavioral Risk Factor Survey 1996

Center for Health Statistics
Division of Health
Department of Health and Family Services

Introduction

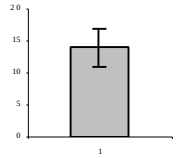
Report scope. This publication is the first annual report based on the Wisconsin Behavioral Risk Factor Survey (BRFS), a statewide survey of Wisconsin adults that focuses on health-risking behaviors and use of preventive health services. The report presents 1996 data on the following risk factors: cigarette smoking, alcohol consumption, overweight, sedentary activity patterns, and poor diet. It also includes information about preventive health services such as routine checkups, cholesterol tests and cancer screening, as well as testing for HIV, the virus that causes AIDS.

- The first section of this report presents information about the percentage of adults who risk their health with certain behaviors, such as cigarette smoking.
- The second section presents information about the percentage of adults who use preventive health services, such as checkups. The reader should be aware of this change in focus, moving from negative behaviors to the positive.
- The third section consists of reference tables, which present more detailed statistical information about the same topics.
- The last section presents information comparing Wisconsin and median United States results for selected measures, along with related public health goals for the Year 2000.

Report purpose. The purpose of the report is to provide statewide estimates of the prevalence of selected risk factors and screening practices. It also provides information about differences by age, education and other characteristics to assist in tailoring prevention efforts. The report also serves as a foundation for tracking the selected measures over time in future annual reports.

Survey sample. The Wisconsin BRFS is a representative, statewide telephone survey of Wisconsin household residents aged 18 and older. The BRFS conducted 2,231 interviews in 1996. Sample sizes for some of the analyses presented in this report are smaller than the total sample size since they are limited to a subpopulation (women 50 and older, for example). Further information about sample design and weighting is provided in the Technical Notes.

How to use this report. Results in this report consist primarily of 1996 prevalence estimates; that is, the estimated percentage of the adult Wisconsin population in that year who reported a given behavior (such as cigarette smoking). The figures include a line for each estimate that indicates the margin of error or confidence interval.



The reference tables include a confidence interval for each percentage estimate as well as the estimated number in the population represented by that percentage. Refer to the Technical Notes for explanation of confidence intervals, definitions, and methodological information. The report also includes a table that lists relevant public health objectives for the year 2000, the 1996 Wisconsin estimate for each objective, and each corresponding national median for all states.

National system. The Wisconsin BRFS is part of the national Behavioral Risk Factor Surveillance System (BRFSS), which is coordinated by the federal Centers for Disease Control and Prevention (CDC). Every state health department conducts a survey as part of the system, whose purpose is to measure some of the behavioral risks related to premature death among U.S. adults. Comparative BRFSS results for all states appear occasionally in the CDC publication, "Morbidity and Mortality Weekly Report." BRFSS results are used in many ways:

- Assessing risk for chronic diseases
- Identifying demographic differences and trends in health-related behaviors
- Designing and monitoring health interventions and services
- Addressing emergent and critical health issues
- Formulating policy and proposing legislation for health initiatives
- Measuring progress toward achieving state and national health objectives.

Importance of tracking risk factors. An accumulating body of scientific research has demonstrated the relationship between certain behaviors and a higher risk of chronic disease or injury. The chart below shows some of the most clearly established of these relationships.

Behavioral Risk Factors for Disease and Injury

	Disease and Injury							
Behavioral Risk Factor	**Heart Disease**	**Cancer**	**Stroke**	**Diabetes**	**Liver Disease**	**Lung Disease**	**Complications of Pregnancy**	**Motor Vehicle Injury**
Smoking	Ö	Ö	Ö			Ö	Ö	
Binge Drinking					Ö		Ö	Ö
Chronic Drinking		Ö			Ö		Ö	Ö
Drinking & Driving							Ö	Ö
Overweight	Ö	Ö		Ö			Ö	
Sedentary Activity Pattern	Ö	Ö		Ö			Ö	
Poor Nutrition	Ö	Ö		Ö			Ö	

Note: Adapted from various sources.

Acknowledgments. This report was prepared in the Center for Health Statistics. Constance Stevens was lead research analyst, with primary responsibility for computer analysis of results and determining the content of the report. Kathleen Bailey supervised the project. Eleanor Cautley and Pamela Imm, who also work with BRFS data, provided consultation in all phases of the analysis and report preparation. Bernie Tennis contributed computer programming advice. Patricia Nametz edited the report. Colleagues in the Bureau of Public Health who provided guidance in determining report content include Sandi Park, James Vergeront, M.D., and Neil Hoxie. The Wisconsin Survey Research Laboratory (University of Wisconsin-Extension) conducted BRFS sampling and interviewing.

The Center for Health Statistics thanks the 2,231 Wisconsin residents whose survey responses provided the basis for this report.

Comments, suggestions, and requests for further information may be addressed to Pamela Imm:

Division of Health
Center for Health Statistics
P.O. Box 309, Room 172
Madison, WI 53701-0309
608-267-7264
immpb@dhfs.state.wi.us

Contents

Key Findings for 1996

Risk Factors for Disease and Injury

According to the Behavioral Risk Factor Survey, an estimated 25 percent of Wisconsin adults age 18 and over were current **cigarette smokers** in 1996.

An estimated 26 percent of Wisconsin adults were **binge drinkers**; that is, they reported having had five or more alcoholic drinks on a single occasion at least once in the past month. Men were much more likely than women to report this drinking behavior.

Six percent of Wisconsin adults reported they had 60 or more alcoholic drinks in the month before they were surveyed; this consumption level is defined as "**chronic drinking**".

Six percent of Wisconsin adults reported **drinking and driving**; that is, they reported having driven at least once after having had "perhaps too much to drink" in the past month.

An estimated 30 percent of Wisconsin adults were **overweight** (based on a measure called the Body Mass Index).

Over half (52 percent) of Wisconsin adults were **sedentary:** they reported no leisure-time physical activity or only irregular activity during the past month.

Three-quarters (75 percent) of Wisconsin adults reported they consume fewer than five servings of **fruits and vegetables** per day.

Preventive Health Care

Statewide in 1996, an estimated 63 percent of Wisconsin adults had received a **routine checkup** in the past year.

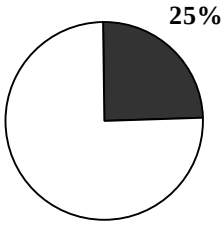
An estimated 69 percent of Wisconsin adults reported they had their **blood cholesterol level checked** within the past five years.

An estimated 86 percent of women reported they had a **cervical cancer test** (Pap smear) within the past three years.

An estimated 59 percent of women aged 50 and older reported they had a **mammogram** in the past year. Fifty-two percent had both a **mammogram and a clinical breast examination** in the past year.

An estimated 40 percent of Wisconsin adults ages 18-64 reported they had ever had their **blood tested for HIV** (human immunodeficiency virus). Another 10 percent had been blood donors since 1985, and so their blood was checked for HIV as part of the blood donation process.

Risk Factors for Disease and Injury



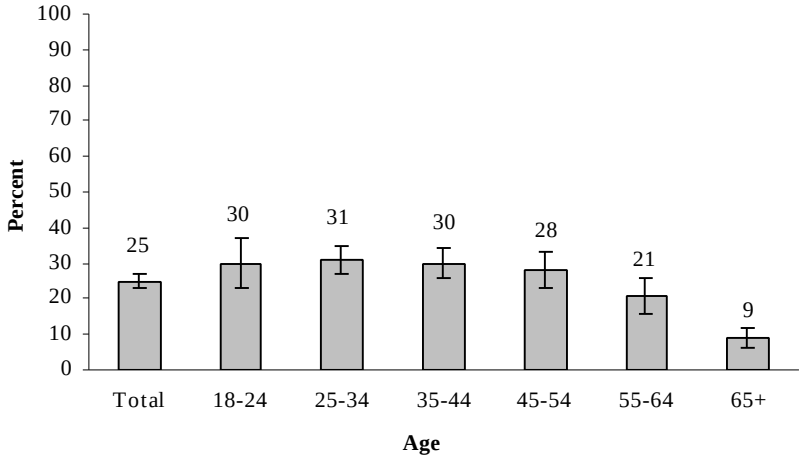
Cigarette Smoking: *Reported having smoked at least 100 cigarettes in lifetime and is a current smoker (has smoked some or all days in the past month).*

Cigarette Smoking

According to the Behavioral Risk Factor Survey, an estimated 25 percent of Wisconsin adults age 18 and over were current cigarette smokers in 1996. This represents about 941,000 people.

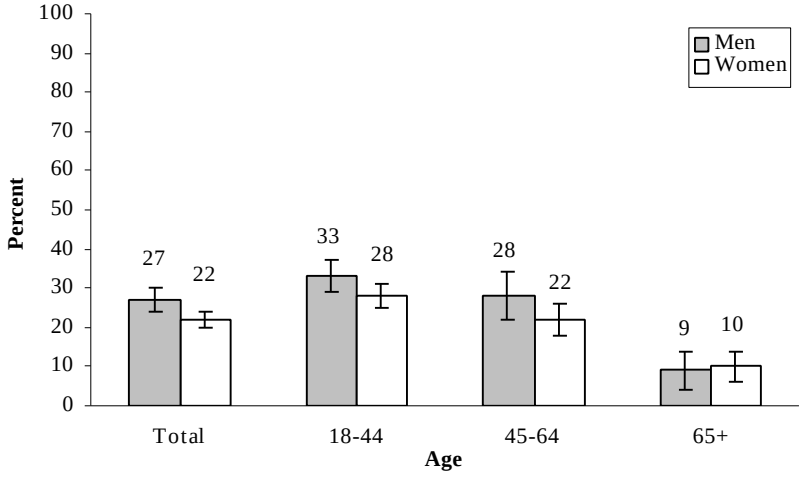
The rate of smoking among the youngest adults (ages 18-24) was 30 percent. The lowest proportion of current smokers was found among people age 65 and older (9 percent). The lower rate of smoking in the oldest age group partly represents the cumulative effect of successful attempts to quit smoking and higher death rates among smokers.

Figure 1. Cigarette Smoking by Age



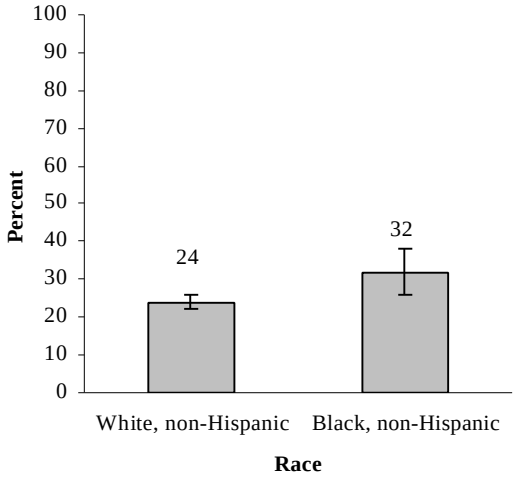
Overall, men were more likely than women to be cigarette smokers (27 vs. 22 percent). Within various age groups, however, smoking rates did not significantly differ between men and women. Twenty-eight percent of women of reproductive age (18-44) were smokers.

Figure 2. Cigarette Smoking by Sex and Age



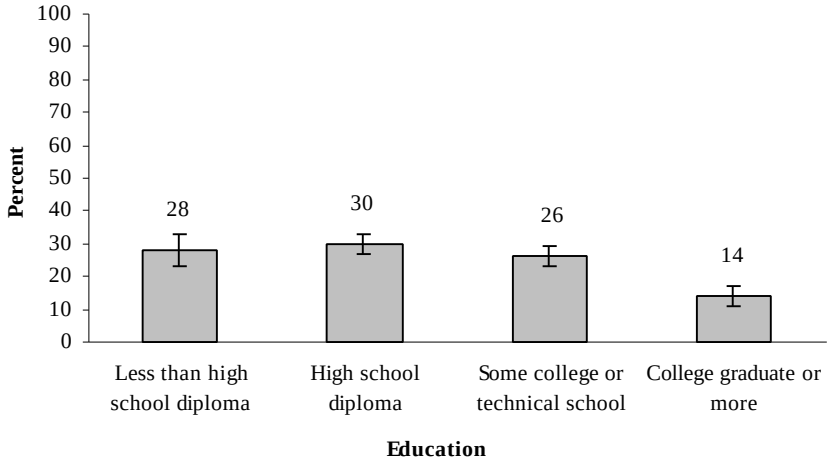
In 1996, an estimated 24 percent of non-Hispanic whites and 32 percent of non-Hispanic blacks were smokers. Sample sizes for other racial/ethnic groups in Wisconsin were too small to produce stable estimates.

Figure 3. Cigarette Smoking by Race



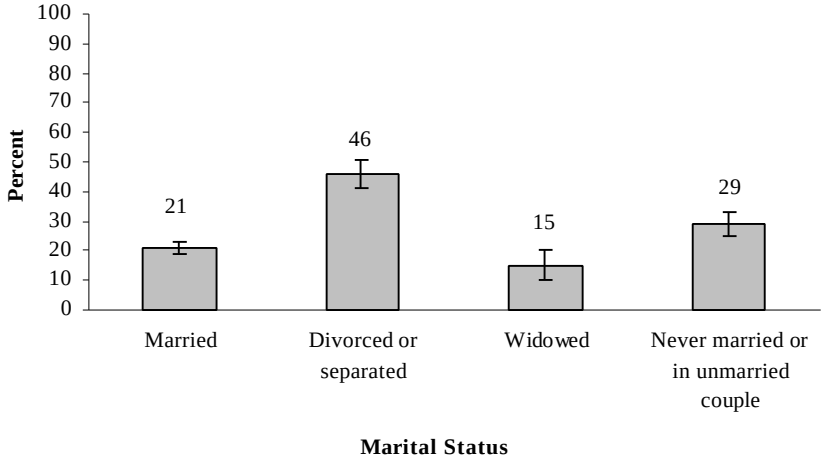
In general, people with higher levels of education are less likely to smoke. This may partly reflect greater success in reaching highly-educated groups with messages about smoking prevention and cessation.

Figure 4. Cigarette Smoking by Education

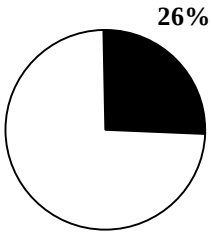


Marital status appears to be strongly associated with smoking. The highest rate of smoking was found among people who were divorced or separated (46%), followed by those who had never married or were part of an unmarried couple (29%), those who were married (21%) and those who were widowed (15%).

Figure 5. Cigarette Smoking by Marital Status



In 1996, an estimated 39 percent of Wisconsin households with children included one or more adult cigarette smokers, and 26 percent included one or more adults who smoke inside the house (not shown). This means that at least one-quarter of Wisconsin children are regularly exposed to cigarette smoke in their own homes.



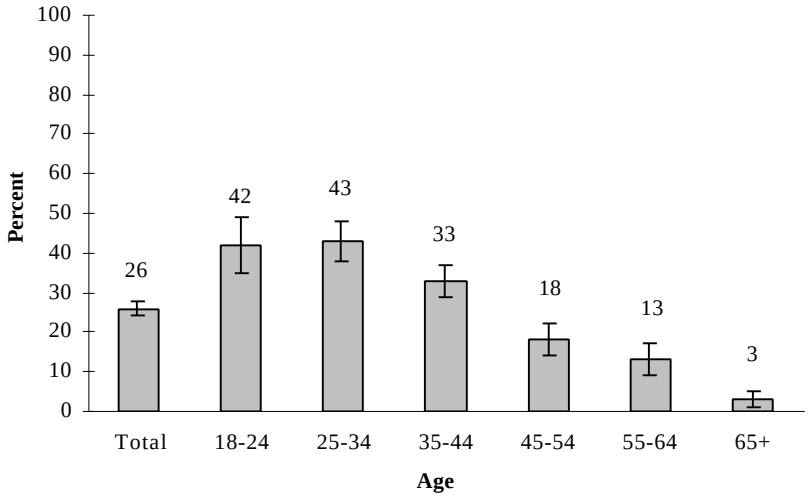
Binge Drinking: *Reported having had five or more alcoholic drinks on a single occasion at least once in the past month.*

Alcohol Consumption: Binge Drinking

In 1996, an estimated 26 percent of Wisconsin adults were binge drinkers. That is, they reported having had five or more drinks on a single occasion at least once in the past month. This is an estimated 982,000 adults in Wisconsin.

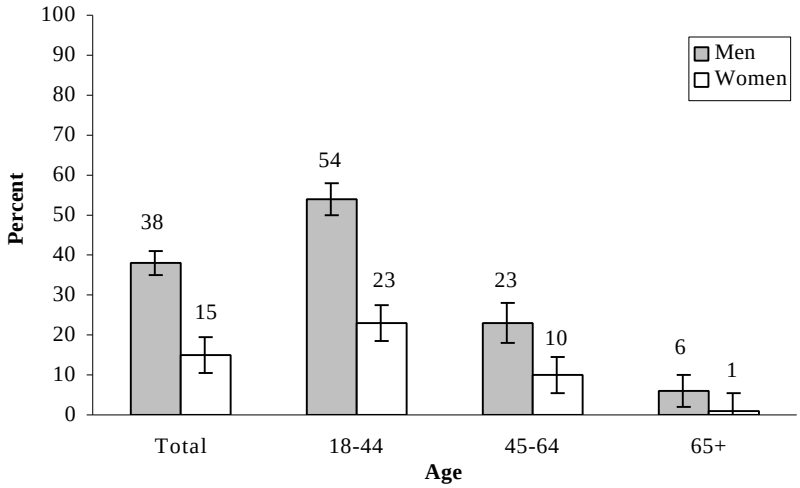
The reported prevalence of binge drinking declines with age.

Figure 6. Binge Drinking by Age



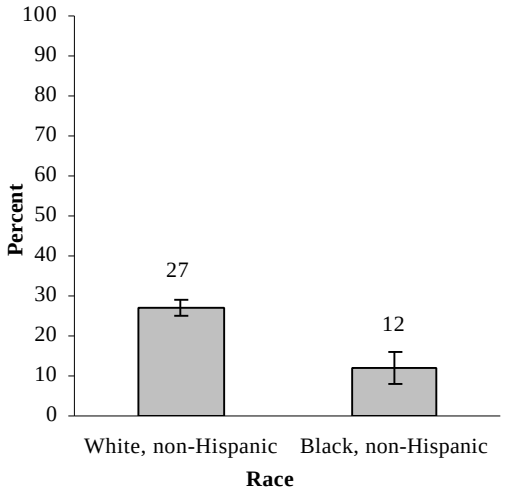
At every age, men are much more likely than women to report binge drinking. Still, 23 percent of women of childbearing age (18-44) said they drink at the level defined as binge drinking.

Figure 7. Binge Drinking by Sex and Age



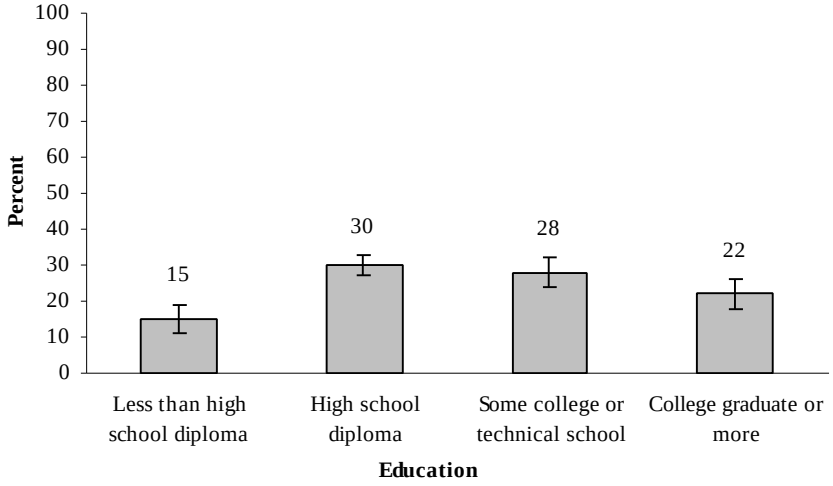
A smaller proportion of non-Hispanic blacks reported binge drinking (12%), compared with non-Hispanic whites (27%). Sample sizes for other racial/ethnic groups in Wisconsin were too small to produce stable estimates.

Figure 8. Binge Drinking by Race



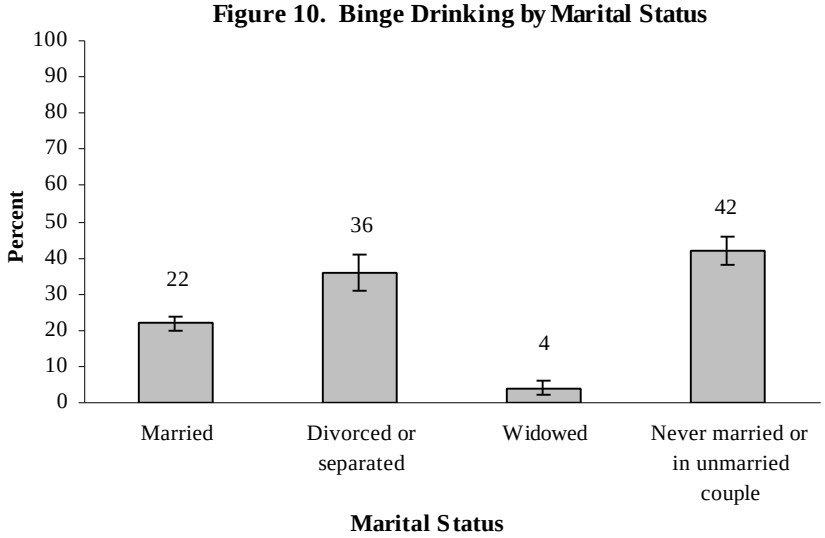
Binge drinking was reported by similar proportions of persons at several levels of educational attainment. In 1996, it was reported less frequently by those with less than a high school education.

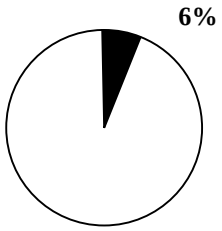
Figure 9. Binge Drinking by Education



Binge drinking was reported most often by adults who had never married or were part of an unmarried couple (42%), and by those who were divorced or separated (36%). Widowed persons had the lowest reported level of binge drinking (4%), partly because they tend to be elderly. Twenty-two percent of married people reported this drinking behavior.

Figure 10. Binge Drinking by Marital Status





Chronic Drinking: *Reported having had 60 or more alcoholic drinks in the past month.*

Alcohol Consumption: Chronic Drinking

In 1996, an estimated 6 percent of Wisconsin adults (about 242,000 people) reported having had 60 or more drinks in the past month. This self-reported consumption level is defined as chronic drinking.

The prevalence of chronic drinking declines with age. In 1996, the proportion ranged from 10 percent of adults aged 18-24 to 2 percent of adults aged 65 and older.

Figure 11. Chronic Drinking by Age

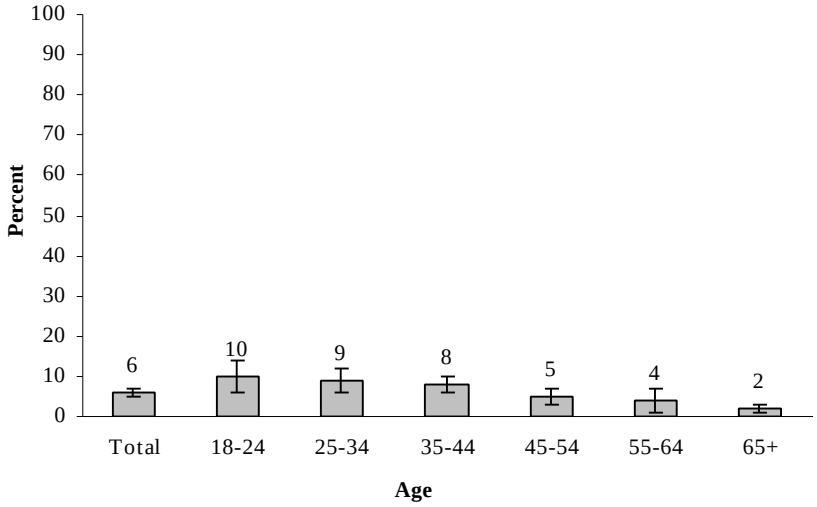


Figure 12. Chronic Drinking by Sex and Age

At every age, men are more likely than women to report chronic drinking. Overall, 12 percent of males and 1 percent of females said they drink at this level.

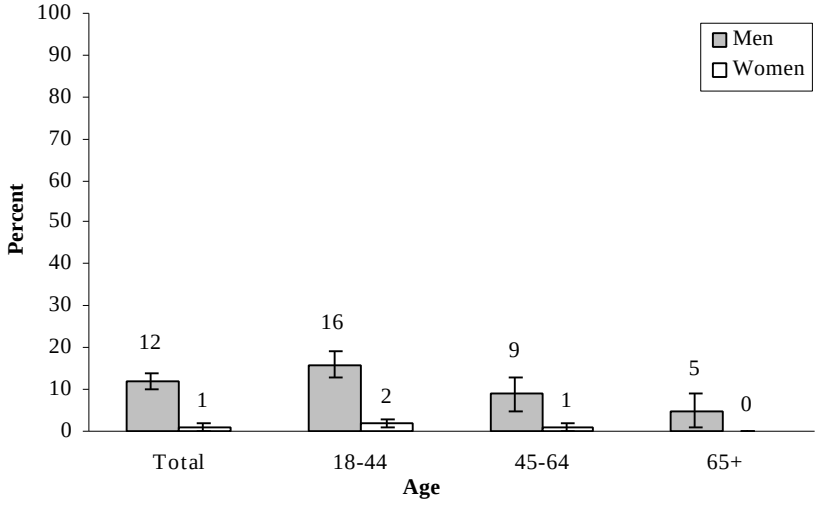


Figure 13. Chronic Drinking by Education

In 1996, adults whose highest educational attainment was a high school diploma had the highest estimated prevalence of chronic drinking (9%).

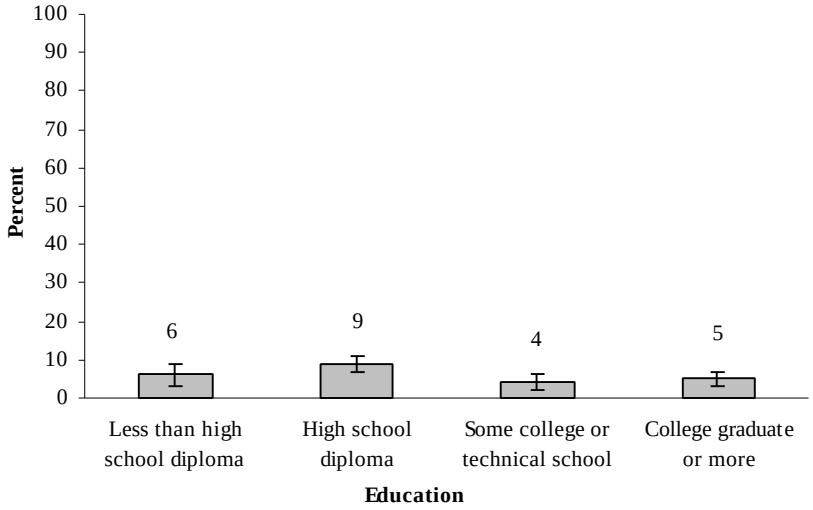
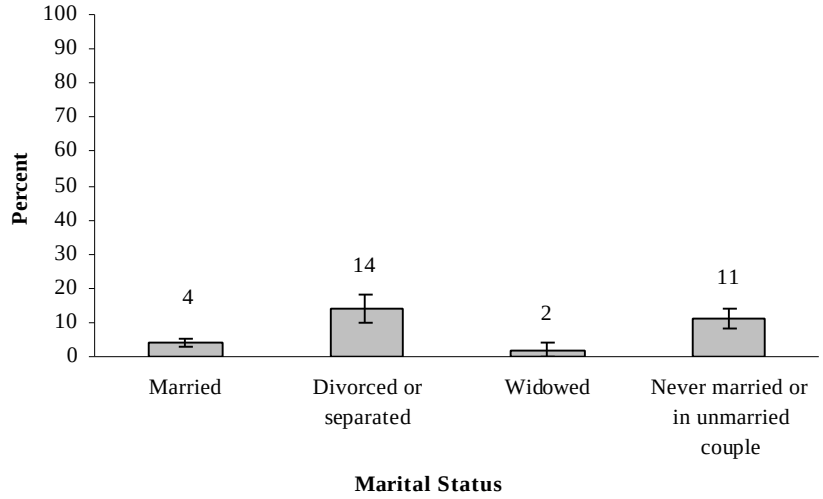
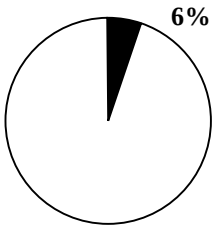


Figure 14. Chronic Drinking by Marital Status

As with binge drinking, chronic drinking is reported in higher proportions among people who are divorced or separated (14%), or never married or in an unmarried couple (11%), than among those who are married (4%) or widowed (2%).



Note: Chronic drinking behavior is further defined in the Technical Notes.



Drinking and Driving: *Reported having driven at least once after having had "perhaps too much to drink" in the past month.*

Alcohol Consumption: Drinking and Driving

An estimated 6 percent of Wisconsin adults (about 210,000 people) reported drinking and driving in 1996.

Young adults were most likely to report this behavior. Drinking and driving was reported by 10 percent of Wisconsinites aged 18-24, and 9 percent of those aged 25-34.

Figure 15. Drinking and Driving by Age

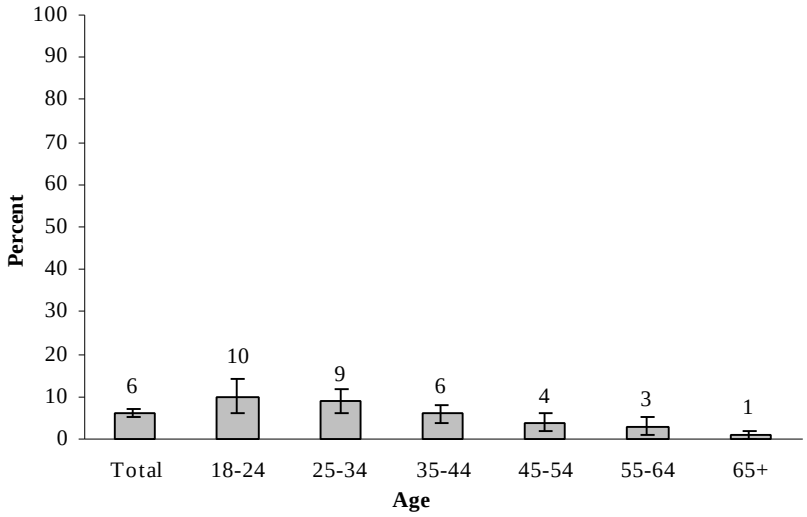
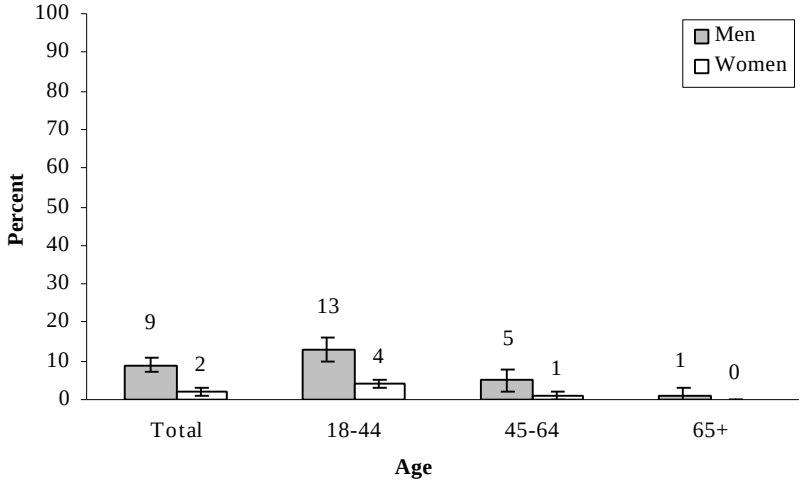


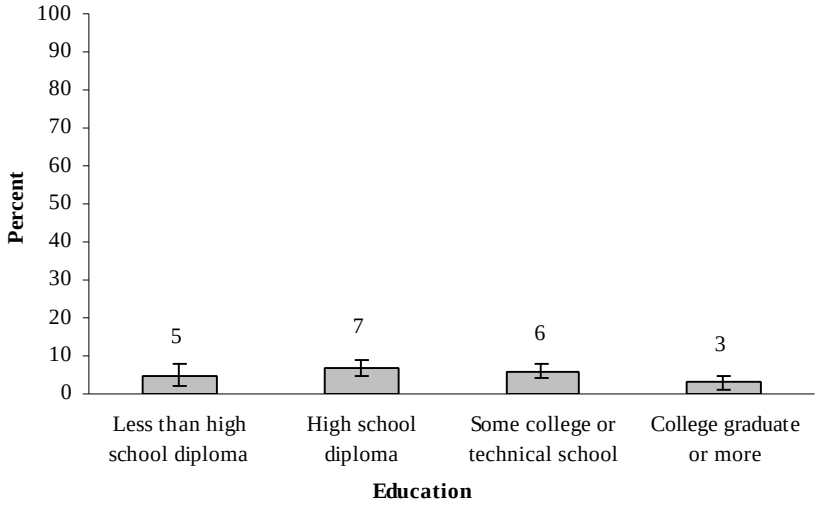
Figure 16. Drinking and Driving by Sex and Age

As with other alcohol consumption measures, drinking and driving was reported more often by men (9%) than by women (2%).



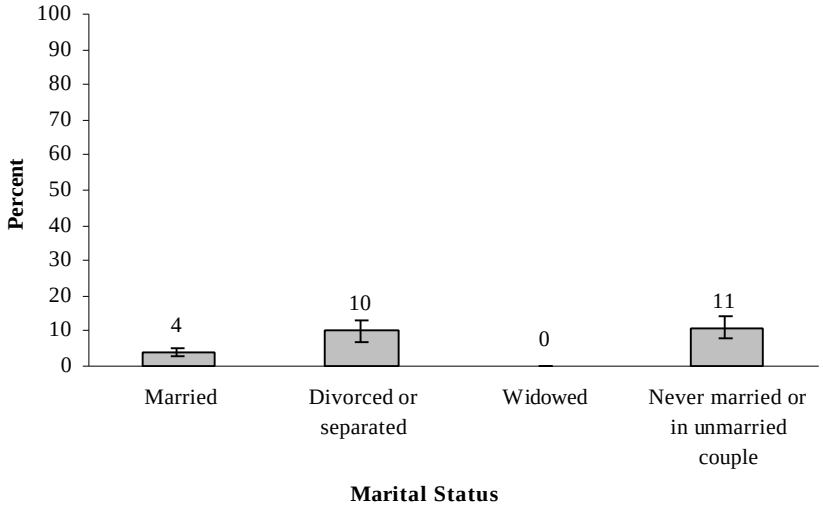
There were no significant differences by educational attainment in the proportion of adults reporting drinking and driving.

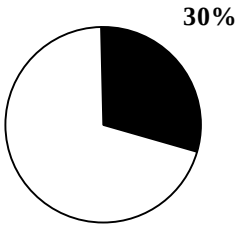
Figure 17. Drinking and Driving by Education



Drinking and driving was reported most often by never-married people or those in an unmarried couple (11%), and by people who were divorced or separated (10%). Four percent of married people, and virtually no one who was widowed, reported drinking and driving.

Figure 18. Drinking and Driving by Marital Status





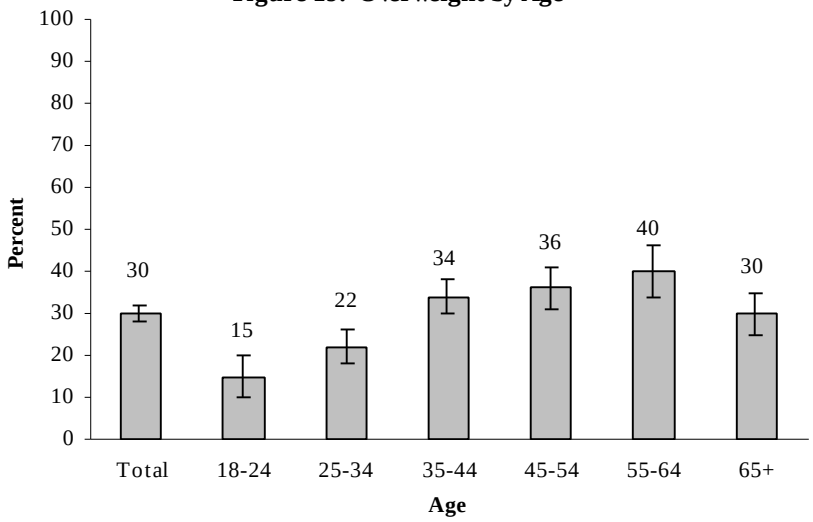
Overweight: *Reported a weight and height that translates into a Body Mass Index (BMI) of 27.8 or above (males) or 27.3 or above (females). BMI is defined as weight in kilograms divided by height in meters squared.*

Overweight

In 1996, an estimated 30 percent of Wisconsin adults were overweight (based on calculations of Body Mass Index made from self-reported height and weight). This represents about 1,132,000 people.

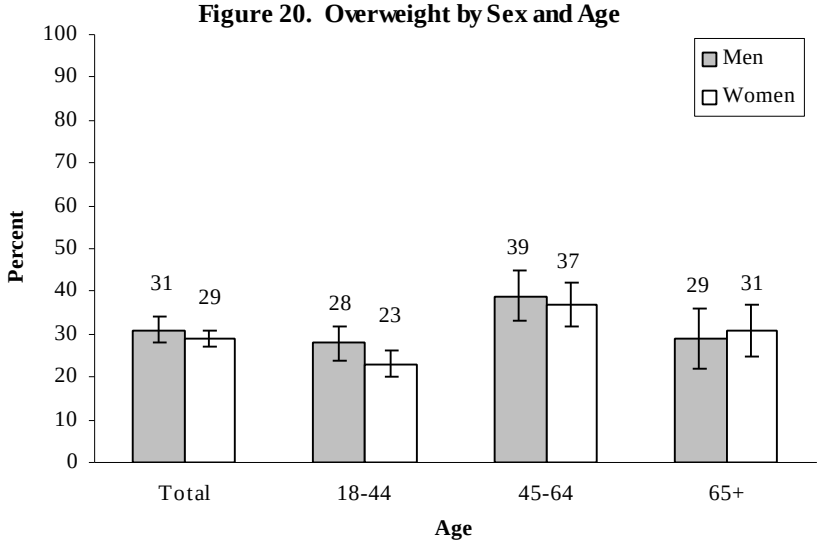
The percentage overweight tends to increase with age.

Figure 19. Overweight by Age



There was no significant difference between the sexes in the proportion who were overweight.

Figure 20. Overweight by Sex and Age



A higher proportion of non-Hispanic blacks were overweight (38%) than non-Hispanic whites (30%).

Figure 21. Overweight by Race

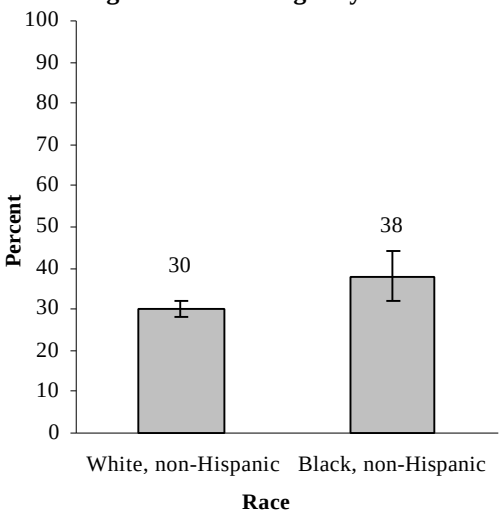
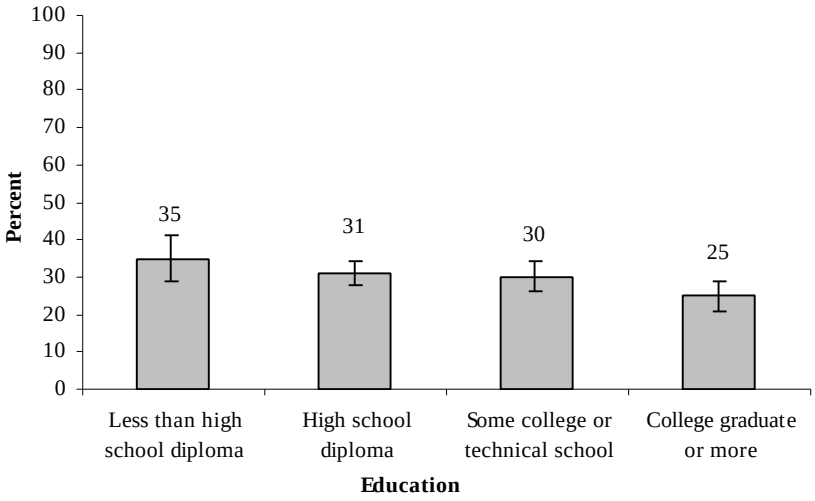
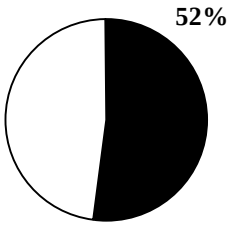


Figure 22. Overweight by Education

The prevalence of overweight tends to decrease with increasing levels of education.



Note: Overweight is further defined in The Technical Notes.



Sedentary: *Reported no leisure-time physical activity or irregular activity (fewer than 20 minutes per session and/or fewer than three times per week) during the past month.*

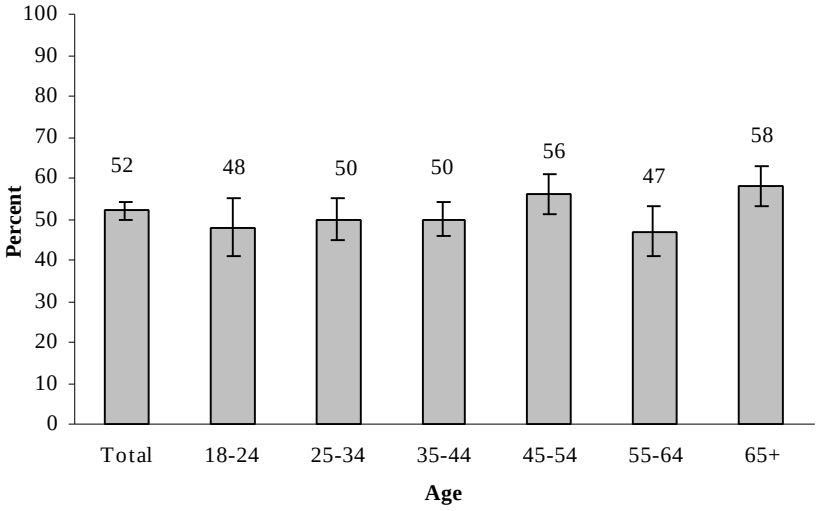
Physical Activity

In 1996, over half (52%) of Wisconsin adults were sedentary. That is, they reported no leisure-time physical activity in the past month, or activity that was brief and/or infrequent.

Roughly half of all adults in every age group had activity patterns defined as sedentary.

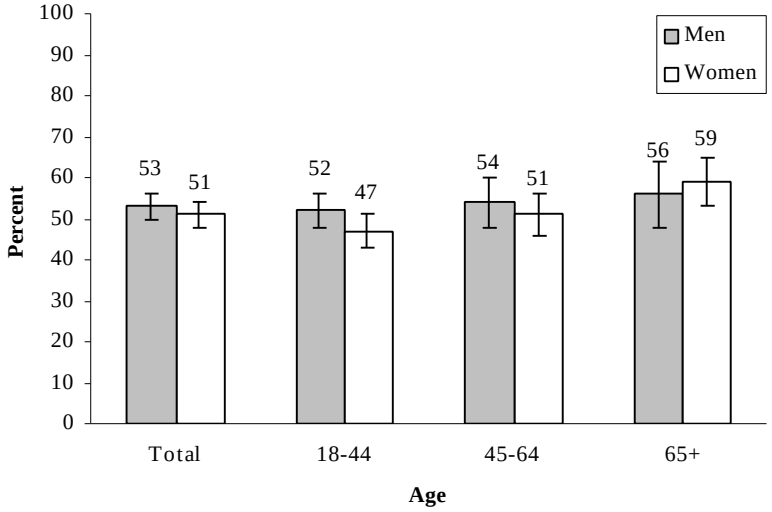
In contrast, an estimated 33 percent of adults exercised regularly, and 15 percent exercised vigorously.

Figure 23. Sedentary Activity Pattern by Age



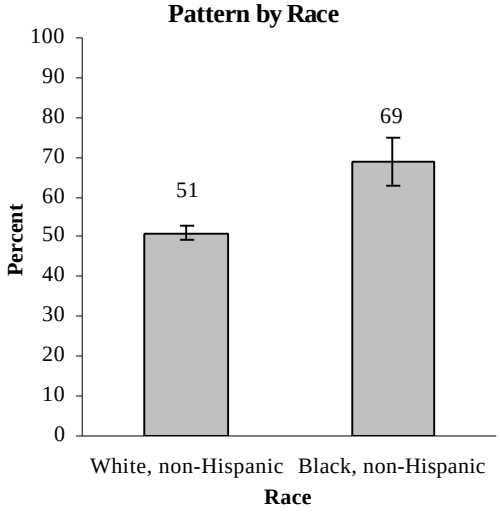
Similar proportions of men and women were sedentary.

Figure 24. Sedentary Activity Pattern by Sex and Age



Sedentary activity patterns were reported by a higher proportion of non-Hispanic blacks (69%) than non-Hispanic whites (51%).

Figure 25. Sedentary Activity Pattern by Race



A large percentage of Wisconsinites at every education level are sedentary. In 1996, the proportion ranged from a low of 41 percent among people with a college degree to a high of 59 percent among those who never graduated from high school.

Figure 26. Sedentary Activity Pattern by Education

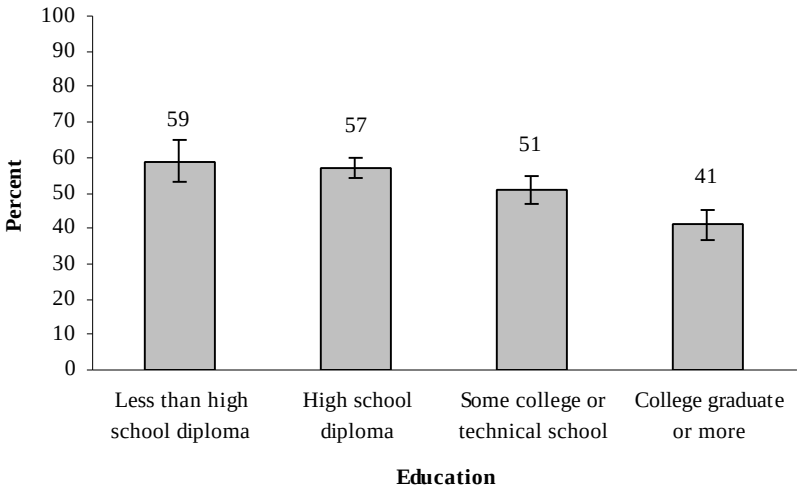
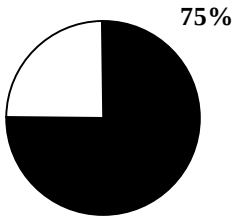


Table 1. Top Ten Exercises (of those who participated in exercise in the past month)

Exercise Type	Total		Men		Women	
	Percent Estimate	C.I. (+/-%)	Percent Estimate	C.I. (+/-%)	Percent Estimate	C.I. (+/-%)
Walking	55	2	44	4	65	3
Running	5	1	8	2	2	1
Gardening	4	1	4	1	3	1
Weight Lifting	4	1	7	2	1	1
Bicycling for Pleasure	3	1	4	1	2	1
Aerobics Class	3	1	1	1	5	1
Basketball	2	1	3	1	*	-
Golf	2	1	4	1	1	1
Home Exercise	1	*	2	1	1	1
Bicycling Machine	1	1	1	1	2	1

* Less than .5 percent

Seventy-eight percent of adults participated in any exercise in the past month. Walking was by far the most popular form of exercise, reported by 55 percent of those who reported any exercise.



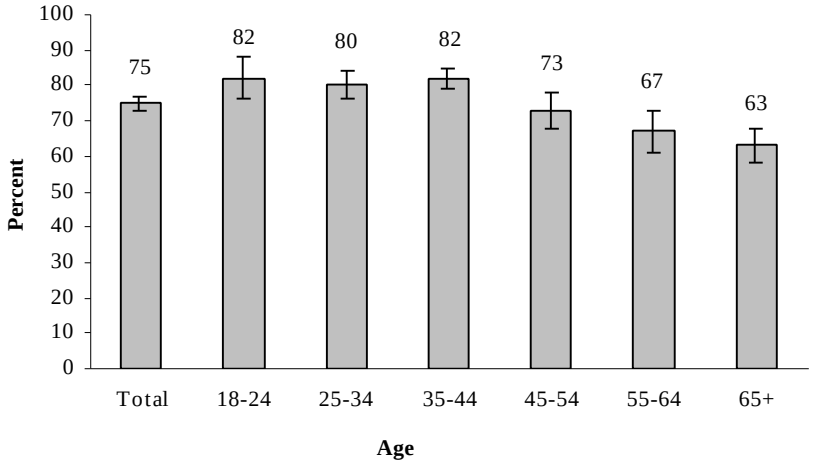
Inadequate Fruit and Vegetable Consumption: *Reported consuming fewer than five servings of fruits and vegetables a day.*

Consumption of Fruits and Vegetables

In 1996, 75 percent of Wisconsin adults reported they consume fewer than five servings of fruits and vegetables per day. This estimate is based on responses to six survey questions about consumption of fruit juices, fruit, green salad, potatoes, carrots, and other vegetables.

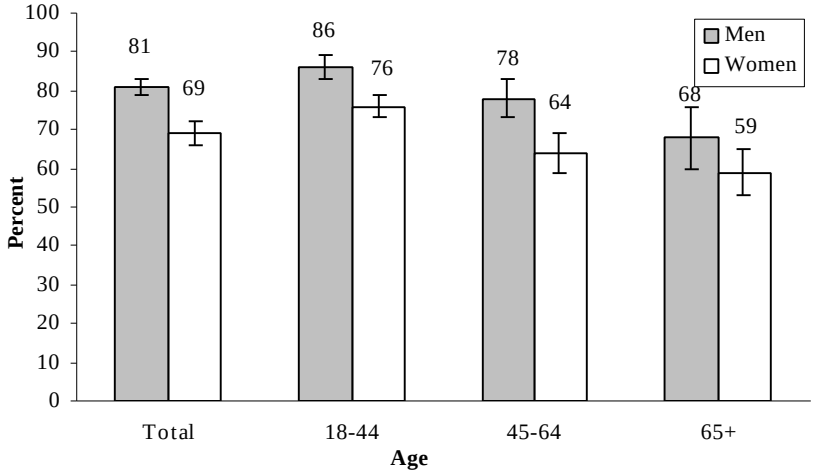
The proportion reporting low fruit and vegetable consumption decreases somewhat with increasing age. Still, more than 60 percent of adults in every age group report eating fewer than five fruits and vegetables per day.

Figure 27. Inadequate Fruit and Vegetable Consumption by Age



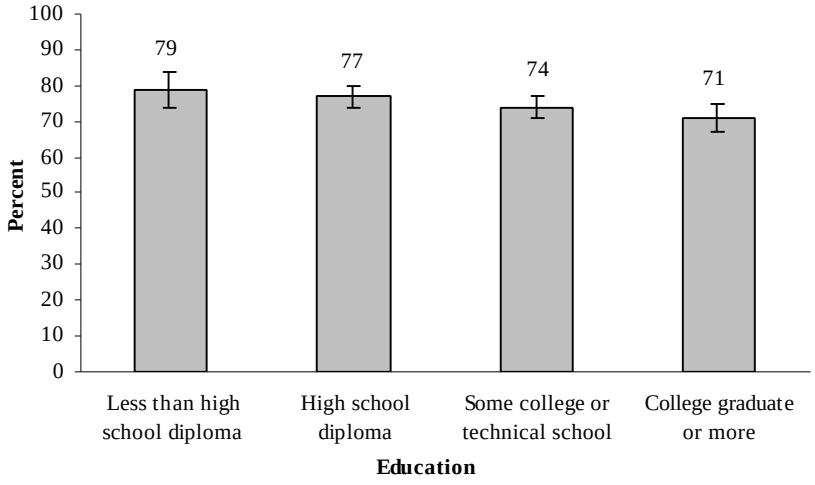
In every age group, men were somewhat more likely than women to report consuming fewer than five fruits and vegetables per day.

Figure 28. Inadequate Fruit and Vegetable Consumption by Sex and Age



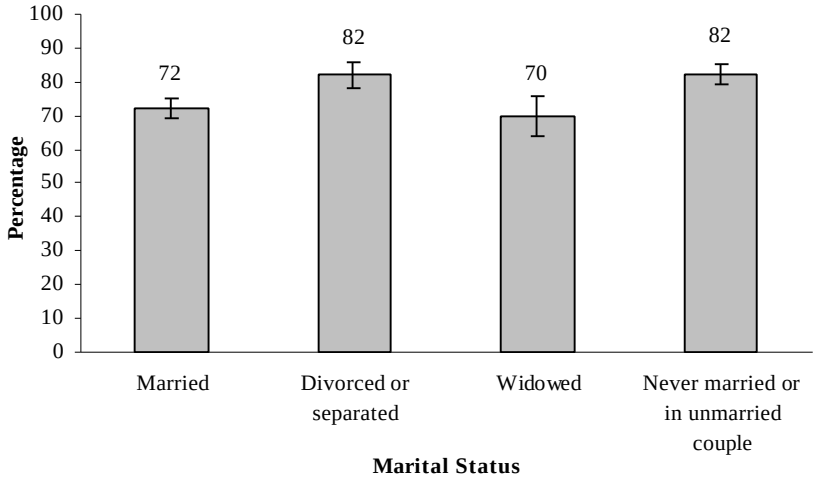
A large majority of people at every educational level ate inadequate amounts of fruits and vegetables.

Figure 29. Inadequate Fruit and Vegetable Consumption by Education



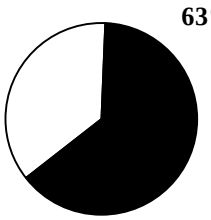
Differences in fruit and vegetable consumption by marital status were not dramatic. A relatively poor diet was reported more often by people who were never married or in an unmarried couple (82%), or divorced or separated (82%), than by people who were married (72%) or widowed (70%).

Figure 30. Inadequate Fruit and Vegetable Consumption by Marital Status



Note: Fruit and vegetable consumption is further defined in The Technical Notes.

Preventive Health Care



Routine Checkup: *Responded "one year or less" when asked, "About how long has it been since you last visited a doctor for a routine checkup?"*

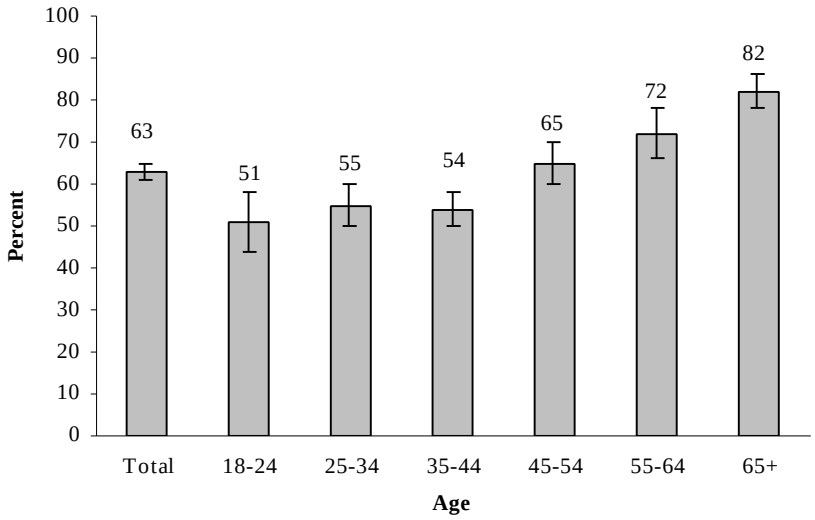
Routine Checkup

Statewide in 1996, an estimated 63 percent of Wisconsin adults (about 2.4 million people) had received a routine checkup within the past year.

Thirty-five percent said their last routine checkup had been more than a year ago: 15 percent within the last 13-24 months, 10 percent within the last 25-60 months, and 10 percent more than five years ago. Two percent said they had never had a routine checkup.

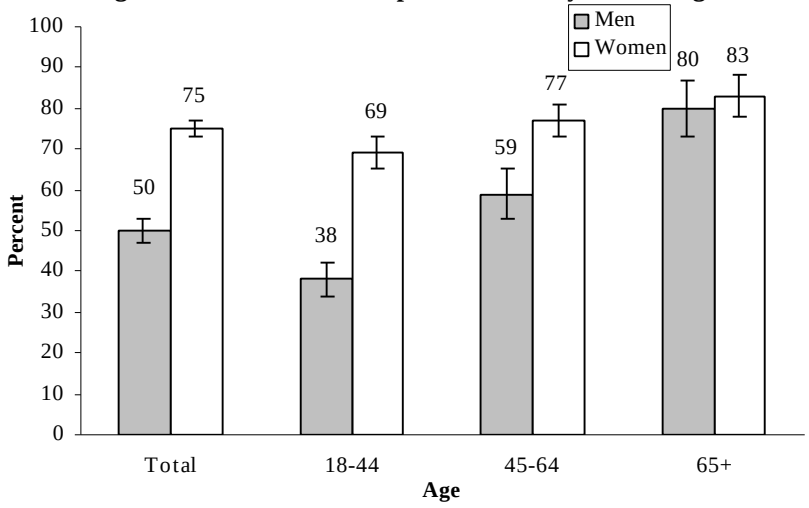
In general, the proportion of adults with a routine checkup in the past year increased with age.

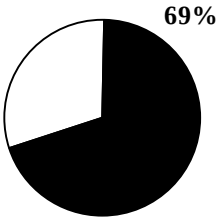
Figure 31. Routine Checkup in Last Year by Age



Overall, women were much more likely than men to report having had a routine checkup in the past year (75% vs. 50%). The difference between the sexes was greatest among persons aged 18-44, and declined with age. Among persons aged 65 and older, women and men were equally likely to have had a routine checkup in the past year.

Figure 32. Routine Checkup in Last Year by Sex and Age





Blood Cholesterol Test: *Responded with any time within the past five years to the question, "About how long has it been since you had your blood cholesterol checked?"*

Blood Cholesterol Test

In 1996, an estimated 69 percent of Wisconsin adults reported they had their blood cholesterol level checked within the past five years. As with other adult health screenings, the proportion reporting a blood cholesterol check increases with age.

Twenty-eight percent of those who reported being tested within the past five years (19 percent of all adults) were told their cholesterol was high.

Eighty-two percent of those with high cholesterol (16 percent of all adults) were advised by a doctor or other professional to lower their blood cholesterol. Forty-six percent of those with high cholesterol (9 percent of all adults) were given a special diet to lower their blood cholesterol level.

Women age 18-44 were more likely than men to say they had a blood cholesterol test within the past five years.

Figure 33. Blood Cholesterol Checked in Past Five Years by Age

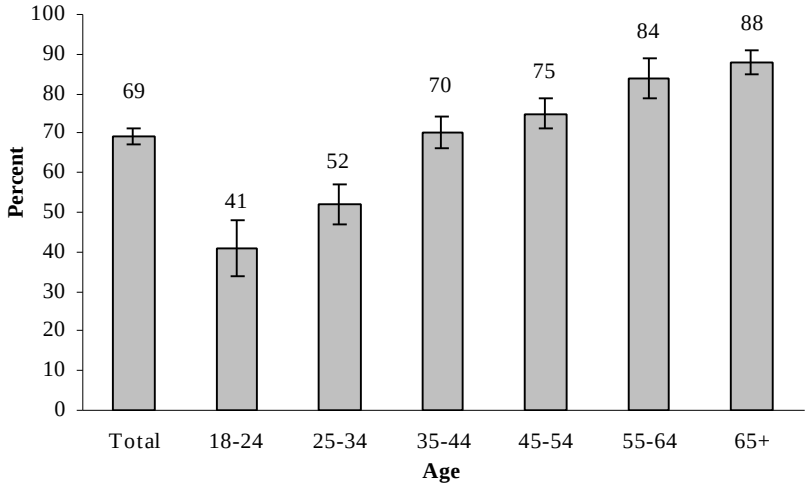
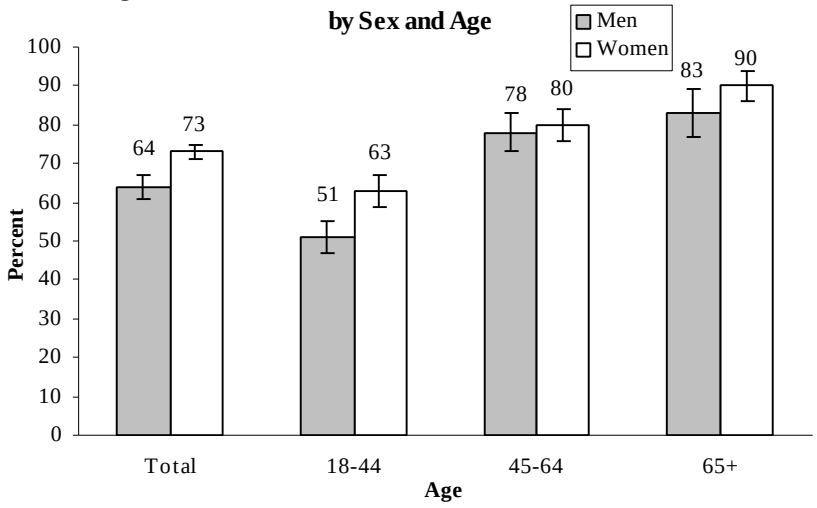
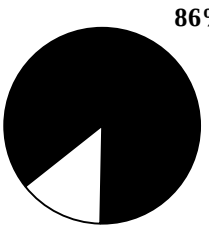


Figure 34. Blood Cholesterol Checked in Past Five Years by Sex and Age





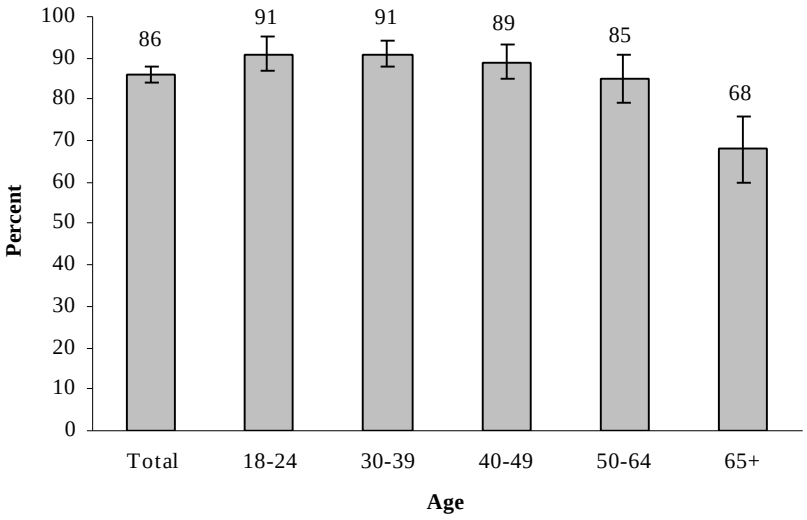
Cervical Cancer Screening: *Women aged 18 and older who reported receiving a Pap smear in the past three years. (Those who reported having had a hysterectomy are excluded.)*

Cervical Cancer Screening

In 1996, an estimated 86 percent of Wisconsin women reported they had a Pap smear (cervical cancer test) within the past three years. This is a total of 1,356,000 women. (Estimates in this section are based only on women who said they had never had a hysterectomy.)

The proportion with a Pap smear within the past three years declined somewhat with age, to a low of 68 percent among women 65 and older.

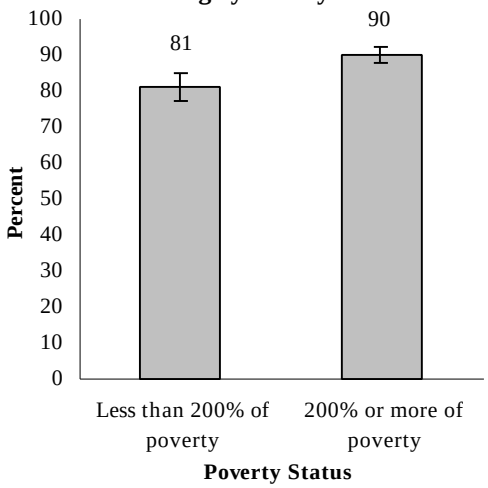
Figure 35. Cervical Cancer Screening by Age



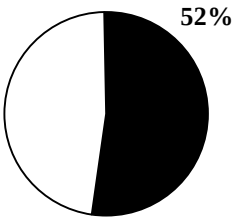
In general, an annual Pap smear is recommended for all women beginning with the onset of sexual activity or no later than age 18. A woman and her doctor may decide to change the frequency of this test after three consecutive annual tests produce normal results.

Low-income women (with household incomes below 200% of the federal poverty level) were less likely to have had a Pap test in the past three years than were women at higher incomes (81% vs. 90%). (The Technical Notes explain poverty status in more detail.)

Figure 36. Cervical Cancer Screening by Poverty Status



(Note: The reference table section has two tables on cervical cancer testing: women who were tested in the past three years (as shown on this page), and women who were tested in the past year.)



Breast Cancer Screening: *Women aged 50 and older who reported receiving a clinical breast examination and mammogram in the past year.*

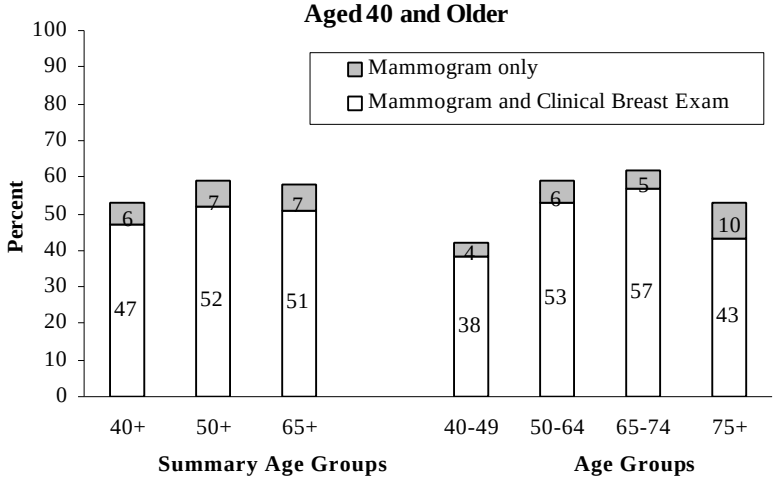
Breast Cancer Screening

In 1996, an estimated 52 percent of women aged 50 and older had both a mammogram and a clinical breast examination in the past year. An estimated 59 percent of women aged 50 and older reported they had a mammogram in the past year.

Most authorities agree that all women age 50 and older should receive a mammogram and clinical breast examination annually. Many also recommend that women in their 40s should receive these screening services every one or two years.

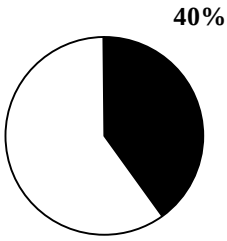
The BRFS sample of women aged 50 and older was too small to permit examining differences in breast cancer screening by age, education, and other demographic measures.

Figure 37. Breast Cancer Screening in Past Year, Women Aged 40 and Older



Note: Bar height indicates all women who have had a mammogram.

(Note: The reference table section provides information about clinical breast examinations among all women aged 18 and older.)

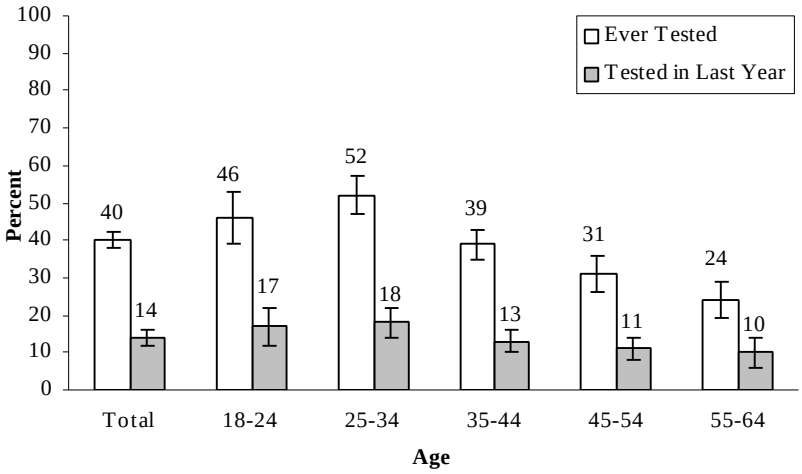


HIV Test: *Adults ages 18-64 who reported ever having their blood tested for HIV, the virus that causes AIDS.*

HIV Test

Forty percent of Wisconsin adults ages 18-64 reported they had ever had their blood tested for HIV (human immunodeficiency virus). This is an estimated 1.2 million adults. About 14 percent had been tested during the last year. (Following CDC protocol, questions about HIV were not asked of respondents older than 64 years.)

Figure 38. Ever Tested for HIV and Tested in Last Year by Age



Another 10 percent of adults 18-64 have donated blood since March 1985, and these have also likely been tested for HIV. (Only adults who reported never being tested for HIV were asked about blood donation, so this is not a complete estimate of blood donors.)

One percent of adults 18-64 reported that their "chances of getting infected with HIV" were high (41,000 people). Another 5 percent said their chances were medium, 31 percent said low, and 61 percent said their chances of HIV infection were none.

There was no significant difference in being tested for HIV between the high, medium and low risk groups. However, actual differences in testing rates between these groups may not have been apparent owing to small sample sizes in the higher risk groups.

Adults who had ever been tested for HIV were asked, "What is the main reason you had your last blood test for HIV?" Over half (61 percent) mentioned various health assessments, such as having surgery, screening during pregnancy, and donating blood (Table 3). Another 25 percent mentioned possible risks for HIV including occupational exposure and partner referral. Eleven percent were tested as part of the application process for either life or health insurance.

Most people who had been tested reported that they had received results of their test. Excluding persons who said their test was part of the blood donation process, 85 percent of those ever tested received test results. Among this group, 29 percent received counseling or talked with a health care professional about their test results.

Adults who had ever been tested for HIV reported getting the test at a variety of sites. Excluding persons who said their test was part of the blood donation process, the most commonly mentioned sites were hospitals (29 percent of those tested); private doctor's offices (28 percent); community, public health, family planning and STD clinics (15 percent); at home (7 percent), and military sites (7 percent). Two percent reported their test occurred at an AIDS clinic.

Table 3. Reasons For Getting HIV Test Among Those Who Were Ever Tested for HIV

Reason	Percent
Various Health Assessments	61%
Blood donation process	12%
Hospital/surgical procedure	12
Routine checkup	11
Pregnancy	8
Military induction/service	7
Employment	5
Illness	3
Marriage license	2
Immigration	1
Risk-Related	25%
Find out if infected	17%
Occupational exposure	4
Referred by sex partner	2
Referred by doctor	1
Is at risk for HIV	1
Insurance Application	11%
Life insurance	9%
Health insurance	2
Other	3%
No Answer	2%

Note: Total sample = 799.

Note: Questions asked about HIV testing are further described in the Technical Notes.

Reference Tables

Table R1. Cigarette Smoking, Adults 18 and Older

	Percent Estimate	C.I. (+/-%)	Estimated Number
Total	25%	2%	941,000
Sex and Age Group			
Men	27	3	501,000
18-44	33	4	334,000
45-64	28	6	142,000
65+	9	5	26,000
Women	22	2	440,000
18-44	28	3	284,000
45-64	22	4	116,000
65+	10	4	40,000
Age Group			
18-24	30	7	128,000
25-34	31	4	243,000
35-44	30	4	247,000
45-54	28	5	170,000
55-64	21	5	87,000
65+	9	3	66,000
Race			
White, non-Hispanic	24	2	819,000
Black, non-Hispanic	32	6	43,000
Education			
Less than high school diploma	28	5	116,000
High school diploma	30	3	424,000
Some college or technical school	26	3	284,000
College graduate or more	14	3	118,000
Household Income			
$0 to $14,999	20	5	60,000
$15,000 to $24,999	28	4	212,000
$25,000 to $34,999	30	4	275,000
$35,000 to $49,999	25	4	179,000
$50,000 and over	19	4	143,000
Poverty Status			
<100% of poverty	28	7	58,000
100% to 199% of poverty	29	4	243,000
200% or more of poverty	24	2	568,000
Employment Status			
Employed for wages	30	3	653,000
Self-employed	23	6	74,000
Marital Status			
Married	21	2	506,000
Divorced or separated	46	5	169,000
Widowed	15	5	42,000
Never married/in unmarried couple	29	4	224,000

Cigarette Smoking: Reported having smoked at least 100 cigarettes in lifetime and is a current smoker (has smoked some or all days in the past month).

Table R2. Alcohol Consumption: Binge Drinking, Adults 18 and Older

	Percent Estimate	C.I. (+/-%)	Estimated Number
Total	26%	2%	982,000
Sex and Age Group			
Men	38	3	691,000
18-44	54	4	557,000
45-64	23	5	115,000
65+	6	4	19,000
Women	15	2	291,000
18-44	23	3	235,000
45-64	10	3	51,000
65+	1	1	5,000
Age Group			
18-24	42	7	180,000
25-34	43	5	340,000
35-44	33	4	272,000
45-54	18	4	113,000
55-64	13	4	53,000
65+	3	2	24,000
Race			
White, non-Hispanic	27	2	914,000
Black, non-Hispanic	12	4	17,000
Education			
Less than high school diploma	15	4	61,000
High school diploma	30	3	414,000
Some college or technical school	28	4	314,000
College graduate or more	22	4	191,000
Household Income			
$0 to $14,999	16	5	47,000
$15,000 to $24,999	25	4	189,000
$25,000 to $34,999	29	4	268,000
$35,000 to $49,999	30	5	215,000
$50,000 and over	30	4	223,000
Poverty Status			
<100% of poverty	20	6	41,000
100% to 199% of poverty	25	4	206,000
200% or more of poverty	29	2	696,000
Employment Status			
Employed for wages	33	3	715,000
Self-employed	29	7	94,000
Marital Status			
Married	22	2	509,000
Divorced or separated	36	5	134,000
Widowed	4	2	10,000
Never married/in unmarried couple	42	4	328,000

Binge Drinking: Reported having had five or more alcoholic drinks on a single occasion at least once in the past month.

Table R3. Alcohol Consumption: Chronic Drinking, Adults 18 and Older

	Percent Estimate	C.I. (+/-%)	Estimated Number
Total	6%	1%	242,000
Sex and Age Group			
Men	12	2	221,000
18-44	16	3	159,000
45-64	9	4	47,000
65+	5	4	16,000
Women	1	1	21,000
18-44	2	1	17,000
45-64	1	1	4,000
65+	0	-	-
Age Group			
18-24	10	4	43,000
25-34	9	3	72,000
35-44	8	2	62,000
45-54	5	2	32,000
55-64	4	3	19,000
65+	2	1	16,000
Race			
White, non-Hispanic	7	1	231,000
Black, non-Hispanic	4	2	5,000
Education			
Less than high school diploma	6	3	26,000
High school diploma	9	2	129,000
Some college or technical school	4	2	49,000
College graduate or more	5	2	39,000
Household Income			
$0 to $14,999	3	2	10,000
$15,000 to $24,999	7	2	54,000
$25,000 to $34,999	6	2	59,000
$35,000 to $49,999	7	3	53,000
$50,000 and over	8	3	58,000
Poverty Status			
<100% of poverty	2	2	4,000
100% to 199% of poverty	8	2	63,000
200% or more of poverty	7	1	166,000
Employment Status			
Employed for wages	8	1	174,000
Self-employed	9	4	30,000
Marital Status			
Married	4	1	99,000
Divorced or separated	14	4	50,000
Widowed	2	2	6,000
Never married/in unmarried couple	11	3	87,000

Chronic Drinking: Reported having had 60 or more alcoholic drinks in the past month.

Table R4. Alcohol Consumption: Drinking And Driving, Adults 18 and Older

	Percent Estimate	C.I. (+/-%)	Estimated Number
Total	6%	1%	210,000
Sex and Age Group			
Men	9	2	164,000
18-44	13	3	134,000
45-64	5	3	26,000
65+	1	2	4,000
Women	2	1	46,000
18-44	4	1	38,000
45-64	1	1	7,000
65+	0	-	-
Age Group			
18-24	10	4	44,000
25-34	9	3	75,000
35-44	6	2	53,000
45-54	4	2	23,000
55-64	3	2	11,000
65+	1	1	4,000
Race			
White, non-Hispanic	6	1	198,000
Black, non-Hispanic	4	2	5,000
Education			
Less than high school diploma	5	3	20,000
High school diploma	7	2	97,000
Some college or technical school	6	2	64,000
College graduate or more	3	2	29,000
Household Income			
$0 to $14,999	5	3	14,000
$15,000 to $24,999	4	2	30,000
$25,000 to $34,999	6	2	54,000
$35,000 to $49,999	8	3	59,000
$50,000 and over	6	2	43,000
Poverty Status			
<100% of poverty	5	3	11,000
100% to 199% of poverty	4	2	32,000
200% or more of poverty	7	1	158,000
Employment Status			
Employed for wages	7	1	157,000
Self-employed	8	4	25,000
Marital Status			
Married	4	1	88,000
Divorced or separated	10	3	36,000
Widowed	0	-	-
Never married/in unmarried couple	11	3	86,000

Drinking and Driving: Reported having driven at least once after having had "perhaps too much to drink" in the past month.

Table R5. Overweight, Adults 18 and Older

	Percent Estimate	C.I. (+/-%)	Estimated Number
Total	30%	2%	1,132,000
Sex and Age Group			
Men	31	3	569,000
18-44	28	4	283,000
45-64	39	6	201,000
65+	29	7	85,000
Women	29	2	562,000
18-44	23	3	237,000
45-64	37	5	193,000
65+	31	6	133,000
Age Group			
18-24	15	5	62,000
25-34	22	4	178,000
35-44	34	4	280,000
45-54	36	5	225,000
55-64	40	6	169,000
65+	30	5	217,000
Race			
White, non-Hispanic	30	2	1,022,000
Black, non-Hispanic	38	6	50,000
Education			
Less than high school diploma	35	6	143,000
High school diploma	31	3	434,000
Some college or technical school	30	4	334,000
College graduate or more	25	4	219,000
Household Income			
$0 to $14,999	31	6	95,000
$15,000 to $24,999	28	4	212,000
$25,000 to $34,999	29	4	269,000
$35,000 to $49,999	35	5	249,000
$50,000 and over	27	4	204,000
Poverty Status			
<100% of poverty	30	7	62,000
100% to 199% of poverty	27	4	225,000
200% or more of poverty	31	2	742,000
Employment Status			
Employed for wages	29	2	637,000
Self-employed	29	7	95,000
Marital Status			
Married	33	3	782,000
Divorced or separated	32	5	117,000
Widowed	34	6	95,000
Never married/in unmarried couple	17	3	134,000

Overweight: Reported a weight and height that translates into a Body Mass Index (BMI) of 27.8 or above (males) or 27.3 or above (females). BMI is defined as weight in kilograms divided by height in meters squared.

Table R6. Sedentary Activity Pattern, Adults 18 and Older

	Percent Estimate	C.I. (+/-%)	Estimated Number
Total	52%	2%	1,971,000
Sex and Age Group			
Men	53	3	976,000
18-44	52	4	533,000
45-64	54	6	278,000
65+	56	8	166,000
Women	51	3	995,000
18-44	47	4	479,000
45-64	51	5	266,000
65+	59	6	250,000
Age Group			
18-24	48	7	202,000
25-34	50	5	401,000
35-44	50	4	409,000
45-54	56	5	348,000
55-64	47	6	196,000
65+	58	5	416,000
Race			
White, non-Hispanic	51	2	1,753,000
Black, non-Hispanic	69	6	92,000
Education			
Less than high school diploma	59	6	245,000
High school diploma	57	3	794,000
Some college or technical school	51	4	568,000
College graduate or more	41	4	361,000
Household Income			
$0 to $14,999	53	7	161,000
$15,000 to $24,999	62	4	464,000
$25,000 to $34,999	54	4	499,000
$35,000 to $49,999	51	5	364,000
$50,000 and over	41	5	309,000
Poverty Status			
<100% of poverty	68	7	142,000
100% to 199% of poverty	56	5	460,000
200% or more of poverty	50	3	1,195,000
Employment Status			
Employed for wages	52	3	1,125,000
Self-employed	53	7	171,000
Marital Status			
Married	52	3	1,233,000
Divorced or separated	51	5	187,000
Widowed	62	6	174,000
Never married/in unmarried couple	48	4	374,000

Sedentary: Reported no leisure-time physical activity or irregular activity (fewer than 20 minutes per session and/or fewer than three times per week) during the past month.

Table R7. Inadequate Fruit and Vegetable Consumption, Adults 18 and Older

	Percent Estimate	C.I. (+/-%)	Estimated Number
Total	75%	2%	2,840,000
Sex and Age Group			
Men	81	2	1,482,000
18-44	86	3	882,000
45-64	78	5	398,000
65+	68	8	202,000
Women	69	3	1,359,000
18-44	76	3	773,000
45-64	64	5	334,000
65+	59	6	252,000
Age Group			
18-24	82	6	348,000
25-34	80	4	635,000
35-44	82	3	672,000
45-54	73	5	451,000
55-64	67	6	282,000
65+	63	5	453,000
Race			
White, non-Hispanic	75	2	2,574,000
Black, non-Hispanic	72	5	96,000
Education			
Less than high school diploma	79	5	329,000
High school diploma	77	3	1,072,000
Some college or technical school	74	3	814,000
College graduate or more	71	4	620,000
Household Income			
$0 to $14,999	79	5	239,000
$15,000 to $24,999	73	4	551,000
$25,000 to $34,999	74	4	685,000
$35,000 to $49,999	79	4	567,000
$50,000 and over	73	4	548,000
Poverty Status			
<100% of poverty	77	6	161,000
100% to 199% of poverty	76	4	625,000
200% or more of poverty	75	2	1,804,000
Employment Status			
Employed for wages	77	2	1,673,000
Self-employed	83	5	269,000
Marital Status			
Married	72	3	1,700,000
Divorced or separated	82	4	301,000
Widowed	70	6	196,000
Never married/in unmarried couple	82	3	640,000

Inadequate Fruit and Vegetable Consumption: Reported consuming fewer than five servings of fruits and vegetables a day.

Table R8. Routine Checkup in the Past Year, Adults 18 and Older

	Percent Estimate	C.I. (+/-%)	Estimated Number
Total	63%	2%	2,387,000
Sex and Age Group			
Men	50	3	919,000
18-44	38	4	385,000
45-64	59	6	299,000
65+	80	7	235,000
Women	75	2	1,468,000
18-44	69	4	705,000
45-64	77	4	408,000
65+	83	5	355,000
Age Group			
18-24	51	7	218,000
25-34	55	5	434,000
35-44	54	4	438,000
45-54	65	5	404,000
55-64	72	6	302,000
65+	82	4	591,000
Race			
White, non-Hispanic	63	2	2,139,000
Black, non-Hispanic	71	5	96,000
Education			
Less than high school diploma	65	6	271,000
High school diploma	63	3	877,000
Some college or technical school	61	4	677,000
College graduate or more	64	4	555,000
Household Income			
$0 to $14,999	68	6	205,000
$15,000 to $24,999	61	4	458,000
$25,000 to $34,999	63	4	581,000
$35,000 to $49,999	62	5	440,000
$50,000 and over	60	5	449,000
Poverty Status			
<100% of poverty	59	8	123,000
100% to 199% of poverty	61	5	502,000
200% or more of poverty	63	3	1,508,000
Employment Status			
Employed for wages	58	3	1,248,000
Self-employed	52	7	170,000
Marital Status			
Married	65	3	1,539,000
Divorced or separated	58	5	215,000
Widowed	80	5	224,000
Never married/in unmarried couple	52	4	405,000

Routine Checkup: Responded "one year or less" when asked, "About how long has it been since you last visited a doctor for a routine checkup?"

Table R9. Blood Cholesterol Test in the Past Five Years, Adults 18 and Older

	Percent Estimate	C.I. (+/-%)	Estimated Number
Total	69%	2%	2,612,000
Sex and Age Group			
Men	64	3	1,168,000
18-44	51	4	526,000
45-64	78	5	396,000
65+	83	6	246,000
Women	73	2	1,444,000
18-44	63	4	637,000
45-64	80	4	422,000
65+	90	4	385,000
Age Group			
18-24	41	7	172,000
25-34	52	5	417,000
35-44	70	4	573,000
45-54	75	4	466,000
55-64	84	5	352,000
65+	88	3	632,000
Race			
White, non-Hispanic	70	2	2,378,000
Black, non-Hispanic	62	6	84,000
Education			
Less than high school diploma	67	6	277,000
High school diploma	70	3	974,000
Some college or technical school	66	4	729,000
College graduate or more	72	4	625,000
Household Income			
$0 to $14,999	65	6	196,000
$15,000 to $24,999	65	4	484,000
$25,000 to $34,999	67	4	622,000
$35,000 to $49,999	68	5	488,000
$50,000 and over	76	4	569,000
Poverty Status			
<100% of poverty	53	8	111,000
100% to 199% of poverty	65	4	538,000
200% or more of poverty	71	2	1,710,000
Employment Status			
Employed for wages	64	3	1,390,000
Self-employed	66	7	214,000
Marital Status			
Married	75	2	1,768,000
Divorced or separated	63	5	233,000
Widowed	84	5	234,000
Never married/in unmarried couple	48	4	372,000

Blood Cholesterol Test: Responded with any time within the past five years to the question, "About how long has it been since you had your blood cholesterol checked?"

Table R10. Cervical Cancer Screening in the Past Three Years, Women 18 and Older

	Percent Estimate	C.I. (+/-%)	Estimated Number
Total	86%	2%	1,356,000
Age Group			
18-29	91	4	365,000
30-39	91	3	336,000
40-49	89	4	296,000
50-64	85	6	198,000
65+	68	8	161,000
Summary Age Groups			
40+	82	3	655,000
50+	77	5	360,000
Race			
White, non-Hispanic	86	2	1,210,000
Black, non-Hispanic	90	5	59,000
Education			
Less than high school diploma	84	7	110,000
High school diploma	86	4	457,000
Some college or technical school	83	4	432,000
College graduate or more	92	3	356,000
Household Income			
$0 to $14,999	78	8	112,000
$15,000 to $24,999	77	6	223,000
$25,000 to $34,999	91	4	327,000
$35,000 to $49,999	89	5	283,000
$50,000 and over	95	3	287,000
Poverty Status			
<200% of poverty	81	4	373,000
200% or more of poverty	90	2	859,000
Employment Status			
Employed for wages	91	2	822,000
Marital Status			
Married	90	3	851,000
Divorced or separated	90	5	126,000
Widowed	60	9	85,000
Never married/in unmarried couple	86	4	292,000

Cervical Cancer Screening: Women aged 18 and older who reported receiving a Pap smear in the past three years. (Those who reported having had a hysterectomy are excluded. An estimated 20 percent of women age 18+ have had a hysterectomy.)

Note: Sample size for this table is 1,017 women. This is less than the total sample of women 18 and older (see demographic summary, p. 48).

Table R11. Cervical Cancer Screening in the Past Year, Women 18 and Older

	Percent Estimate	C.I. (+/-%)	Estimated Number
Total	63%	3%	992,000
Age Group			
18-29	72	6	289,000
30-39	64	6	235,000
40-49	64	6	214,000
50-64	60	8	140,000
65+	49	8	115,000
Summary Age Groups			
40+	58	4	468,000
50+	54	6	254,000
Race			
White, non-Hispanic	63	3	883,000
Black, non-Hispanic	73	8	48,000
Education			
Less than high school diploma	59	9	78,000
High school diploma	64	5	341,000
Some college or technical school	56	5	292,000
College graduate or more	72	6	281,000
Household Income			
$0 to $14,999	53	9	77,000
$15,000 to $24,999	57	7	164,000
$25,000 to $34,999	60	6	216,000
$35,000 to $49,999	73	7	231,000
$50,000 and over	71	6	215,000
Poverty Status			
<200% of poverty	55	6	253,000
200% or more of poverty	68	4	650,000
Employment Status			
Employed for wages	67	4	608,000
Marital Status			
Married	64	4	610,000
Divorced or separated	74	7	104,000
Widowed	42	9	60,000
Never married/in unmarried couple	64	6	218,000

Cervical Cancer Screening: Women aged 18 and older who reported receiving a Pap smear in the past year. (Those who reported having had a hysterectomy are excluded. An estimated 20 percent of women age 18+ have had a hysterectomy.)

Note: Sample size for this table is 1,017 women. This is less than the total sample of women 18 and older (see demographic summary, p. 48).

Table R12. Clinical Breast Examination in the Past Year, Women 18 and Older

	Percent Estimate	C.I. (+/-%)	Estimated Number
Total	65%	3%	1,286,000
Age Group			
18-29	69	6	278,000
30-39	63	5	254,000
40-49	65	6	253,000
50-64	64	6	227,000
65-74	69	8	165,000
75+	59	9	109,000
Summary Age Groups			
40+	65	3	754,000
50+	64	4	501,000
65+	64	6	274,000
Race			
White, non-Hispanic	65	3	1,153,000
Black, non-Hispanic	66	7	53,000
Education			
Less than high school diploma	54	8	104,000
High school diploma	66	4	460,000
Some college or technical school	62	5	388,000
College graduate or more	74	5	333,000
Household Income			
$0 to $14,999	56	8	107,000
$15,000 to $24,999	63	6	244,000
$25,000 to $34,999	61	6	279,000
$35,000 to $49,999	73	6	257,000
$50,000 and over	73	6	251,000
Poverty Status			
<100% of poverty	52	9	66,000
100% to 199% of poverty	59	6	259,000
200% or more of poverty	70	3	813,000
Employment Status			
Employed for wages	67	3	697,000
Marital Status			
Married	66	4	776,000
Divorced or separated	71	6	138,000
Widowed	61	7	143,000
Never married/in unmarried couple	63	6	227,000

Clinical Breast Examination: Breast examination by a health professional.

Table R13. Clinical Breast Examination in the Past Two Years, Women 18 and Older

	Percent Estimate	C.I. (+/-%)	Estimated Number
Total	80%	2%	1,580,000
Age Group			
18-29	83	5	332,000
30-39	83	4	334,000
40-49	85	4	330,000
50-64	75	5	266,000
65-74	80	7	192,000
75+	68	8	126,000
Summary Age Groups			
40+	78	3	914,000
50+	75	4	585,000
65+	75	5	318,000
Race			
White, non-Hispanic	80	2	1,415,000
Black, non-Hispanic	78	6	62,000
Education			
Less than high school diploma	68	7	131,000
High school diploma	79	4	548,000
Some college or technical school	81	4	505,000
College graduate or more	88	4	395,000
Household Income			
$0 to $14,999	72	7	138,000
$15,000 to $24,999	78	5	302,000
$25,000 to $34,999	79	5	362,000
$35,000 to $49,999	83	5	292,000
$50,000 and over	90	4	307,000
Poverty Status			
<100% of poverty	70	8	88,000
100% to 199% of poverty	78	5	342,000
200% or more of poverty	83	3	970,000
Employment Status			
Employed for wages	83	3	858,000
Marital Status			
Married	81	3	960,000
Divorced or separated	82	5	159,000
Widowed	73	6	171,000
Never married/in unmarried couple	80	5	287,000

Clinical Breast Examination: Breast examination by a health professional.

Table R14. Breast Cancer Screening, Women 40 and Older

	Percent Estimate	C.I. (+/-%)	Estimated Number
Mammogram in the Past Year			
Age Group			
40-49	42	6	163,000
50-64	59	6	210,000
65-74	62	8	148,000
75+	53	9	98,000
Summary Age Groups			
40+	53	4	619,000
50+	59	4	456,000
65+	58	6	246,000
Mammogram in the Past Two Years			
Age Group			
40-49	68	6	262,000
50-64	74	6	260,000
65-74	79	7	191,000
75+	64	9	119,000
Summary Age Groups			
40+	71	3	832,000
50+	73	4	570,000
65+	73	6	310,000
Clinical Breast Exam and Mammogram in the Past Year			
Age Group			
40-49	38	6	149,000
50-64	53	6	186,000
65-74	57	8	137,000
75+	43	9	81,000
Summary Age Groups			
40+	47	4	552,000
50+	52	4	403,000
65+	51	6	217,000
Clinical Breast Exam and Mammogram in the Past Two Years			
Age Group			
40-49	63	6	245,000
50-64	68	6	239,000
65-74	72	8	173,000
75+	57	9	105,000
Summary Age Groups			
40+	65	3	762,000
50+	66	4	517,000
65+	65	6	278,000

Note: Mammogram percentages include women who reported having a clinical breast exam as well as those who did not.
See Table R17 for sample sizes.

Table R15. HIV Test, Adults 18-64

	Percent Estimate	C.I. (+/-%)	Estimated Number
Total	40%	2%	1,226,000
Sex and Age Group			
Men	41	3	620,000
18-44	43	4	439,000
45-64	36	6	181,000
Women	39	3	605,000
18-44	48	4	493,000
45-64	21	4	112,000
Age Group			
18-24	46	7	197,000
25-34	52	5	415,000
35-44	39	4	321,000
45-54	31	5	191,000
55-64	24	5	102,000
Race			
White, non-Hispanic	38	2	1,047,000
Black, non-Hispanic	60	6	70,000
Education			
Less than high school diploma	41	8	83,000
High school diploma	37	4	421,000
Some college or technical school	42	4	390,000
College graduate or more	42	5	329,000
Household Income			
$0 to $14,999	35	8	57,000
$15,000 to $24,999	44	5	221,000
$25,000 to $34,999	39	5	299,000
$35,000 to $49,999	41	5	284,000
$50,000 and over	37	5	271,000
Poverty Status			
<100% of poverty	41	9	67,000
100% to 199% of poverty	41	5	264,000
200% or more of poverty	39	3	801,000
Employment Status			
Employed for wages	41	3	865,000
Self-employed	40	7	120,000
Marital Status			
Married	36	3	708,000
Divorced or separated	49	6	160,000
Widowed	27	11	17,000
Never married/in unmarried couple	46	4	338,000

HIV Test: Adults ages 18-64 who reported ever having their blood tested for HIV, the virus that causes AIDS.

Note: Sample size for this table is 1,838 adults. This is less than the total sample of all adults (see demographic summary, p. 47).

Table R16. Demographic Summary, Entire BRFS Sample

	Percent Estimate	Estimated Number	Sample Size
Total	100%	3,797,000	2,231
Sex and Age Group			
Men	48	1,827,000	947
18-44	56	1,021,000	551
45-64	28	510,502	253
65+	16	295,000	143
Women	52	1,969,000	1,284
18-44	52	1,018,000	667
45-64	27	526,000	367
65+	22	426,000	250
Age Group			
18-24	11	425,000	187
25-34	21	796,000	452
35-44	22	818,000	579
45-54	16	618,000	374
55-64	11	418,512	246
65+	19	721,000	393
Race			
White, non-Hispanic	90	3,420,000	1,831
Black, non-Hispanic	4	134,000	265
Other	6	213,000	119
Education			
Less than high school diploma	11	414,000	272
High school diploma	37	1,397,000	808
Some college or technical school	29	1,106,000	631
College graduate or more	23	873,000	512
Household Income			
$0 to $14,999	8	303,000	216
$15,000 to $24,999	20	750,000	484
$25,000 to $34,999	24	925,000	523
$35,000 to $49,999	19	714,000	393
$50,000 and over	20	746,000	413
Don't know or refused	10	359,000	202
Poverty Status			
<100% of poverty	6	208,000	161
100% to 199% of poverty	22	827,000	444
200% or more of poverty	63	2,403,000	1,424
Don't know or refused	10	359,000	202
Employment Status			
Employed for wages	57	2,161,000	1,283
Self-employed	9	325,000	184
Other	34	1,291,000	748
Marital Status			
Married	62	2,364,000	1,167
Divorced or separated	10	368,000	328
Widowed	7	280,000	225
Never married/in unmarried couple	20	778,000	504

Notes: "Other" race consists of all responses other than non-Hispanic white or non-Hispanic black.
"Other" employment status consists of people who said they were out of work, a homemaker, a student, retired, or unable to work.

Table R17. Demographic Summary, Women 18 and Older

	Percent Estimate	Estimated Number	Sample Size
Total	100%	1,969,000	1,284
Age Group			
18-29	20	402,510	223
30-39	20	400,000	300
40-49	20	388,000	270
50-64	18	353,000	241
65-74	12	240,000	133
75+	9	185,000	117
Summary Age Groups			
40+	59	1,167,000	761
50+	40	779,000	491
65+	22	426,000	250
Race			
White, non-Hispanic	89	1,761,000	1,020
Black, non-Hispanic	4	80,000	176
Other	6	115,000	76
Education			
Less than high school diploma	10	193,000	152
High school diploma	35	697,000	456
Some college or technical school	32	625,000	387
College graduate or more	23	451,000	283
Household Income			
$0 to $14,999	10	192,000	153
$15,000 to $24,999	20	386,000	289
$25,000 to $34,999	23	458,000	283
$35,000 to $49,999	18	350,000	204
$50,000 and over	17	343,000	212
Don't know or refused	12	241,000	143
Poverty Status			
<100% of poverty	6	127,000	117
100% to 199% of poverty	22	436,000	264
200% or more of poverty	59	1,166,000	760
Don't know or refused	12	241,000	143
Employment Status			
Employed for wages	52	1,034,000	701
Self-employed	7	138,000	82
Other	40	792,000	494
Marital Status			
Married	60	1,180,000	608
Divorced or separated	10	193,000	201
Widowed	12	234,000	189
Never married/in unmarried couple	18	359,000	281

Notes: "Other" race consists of all responses other than non-Hispanic white or non-Hispanic black.
"Other" employment status consists of people who said they were out of work, a homemaker, a student, retired, or unable to work.

Selected Public Health Objectives, with Behavioral Risk Factor Survey Results for Wisconsin and the United States

A set of Year 2000 objectives for public health in Wisconsin was developed in 1989. Several of these objectives can be best measured with BRFS results. In some cases, Wisconsin's value can be compared to the rest of the country by using a median value for all participating states. In 1996, 49 states and the District of Columbia participated in the Behavioral Risk Factor Surveillance System. The "CDC Results" columns display the median values for all participating states alongside the comparable Wisconsin estimate. (See Notes for further information.)

	Wisconsin Results		CDC Results for 1996	
	1990	1996	Wis.	U.S. Median
Cigarette Use *Year 2000 Objective:* The proportion of adults 18 years of age or older who smoke will be reduced to 15% or below (3.3.1). *BRFS Measure:* The proportion of adults who reported having smoked at least 100 cigarettes in lifetime and is a current smoker (has smoked some or all days in the past month).	25%	25%	25%	24%
Alcohol Consumption *Year 2000 Objective:* The proportion of the adult population consuming more than two alcoholic drinks a day will be reduced by 20% to 7% of adults (3.4.5). *BRFS Measure:* The proportion of adults who reported consuming two or more alcoholic drinks per day in the past month.	5%	6%	6%	3%*
Overweight *Year 2000 Objective:* The prevalence of overweight adults will be reduced to 25% (3.4.1). *BRFS Measure:* The proportion of adults who reported a weight and height that translates into a Body Mass Index of 27.8 or above (males) or 27.3 or above (females). BMI is defined as weight in kilograms divided by height in meters squared.	23%	30%	31%	29%
Physical Activity *Year 2000 Objective:* The proportion of adults who report regularly participating in moderately intense physical activity will be increased to 75% (3.2.10). *BRFS Measure:* The proportion of adults who reported no physical activity or irregular activity (fewer than 20 minutes per session and/or fewer than three times per week) during the past month.	54%	52%	52%	n.a.

(continued)

	Wisconsin Results		CDC Results for 1996	
	1990	1996	Wis.	U.S. Median
Consumption of Fruits and Vegetables *Year 2000 Objective:* The mean daily dietary fiber intake for adults from a variety of foods, including whole grain products, vegetables, and fruits, will increase to 20 or more grams per day (3.4.4). *BRFS Measure:* The proportion of adults who reported consuming five or more servings of fruits and vegetables a day.	n.a.	25%	25%	24%
Cervical Cancer *Year 2000 Objective:* 80% of women aged 18 and older will have received a Pap smear in the preceding 3 years (3.1.8). *BRFS Measure:* The proportion of women aged 18 and older who reported receiving a Pap smear in the past three years. (Those who reported having had a hysterectomy are excluded.)	n.a.	86%	90%	90%
Breast Cancer *Year 2000 Objective:* 80% of women aged 50 and older will have received a clinical breast exam and a mammogram within the preceding year. *BRFS Measure:* The proportion of women aged 50 and older who reported receiving a clinical breast exam and a mammogram in the past year.	36%	52%	n.a.	n.a.

* Based on data collected in 16 states only.
n.a. = Data not available.

Notes: 1990 Wisconsin results are presented (when available) as a baseline measure for comparison purposes.
Data in the "Wisconsin Results" column for 1996 are based on the entire sample of 2,231 respondents, and are identical to results presented in the body of this report. The "CDC Results" are based on a denominator which excludes responses of *don't know* and *refused*. Thus, sample sizes differ for each measure, and results may differ slightly from those presented in this report. The numbers in parentheses after each Year 2000 Objective indicate the section, chapter and objective number in the report, *Healthier People in Wisconsin: A Public Health Agenda for the Year 2000* (published February 1990).

Sources: *Healthier People in Wisconsin: A Public Health Agenda for the Year 2000,* Wisconsin Department of Health and Family Services (selected objectives); 1996 Wisconsin Behavioral Risk Factor Survey data set (Wisconsin data); *1996 Behavioral Risk Factor Surveillance System Summary Prevalence Report,* Centers for Disease Control and Prevention (national median and comparable Wisconsin results).

Technical Notes

The Wisconsin Behavioral Risk Factor Survey (BRFS) originated as part of a multi-state effort coordinated by the federal Centers for Disease Control and Prevention (CDC) to measure behaviors related to premature mortality among adults in the United States. Wisconsin began conducting the survey in 1984. Over the years, the survey has grown to serve additional public health measurement purposes. This section describes the methods used to collect the survey data in Wisconsin, and provides information necessary to understand the contents of this report.

Results in This Report

All of the information presented in this report is based on weighted results of the 1996 Behavioral Risk Factor Survey. All of the results should be treated as estimates; that is, results are derived from a high-quality survey, but there is some small level of error within all survey results. In order not to give an unwarranted impression of precision, survey results have been rounded: percent estimates are rounded to whole numbers and population estimates are rounded to the nearest 1,000. All results presented in this report are based on at least 100 sample cases.

Each bar graph in this report includes a number at the top of each bar, indicating the percent estimate represented by the bar, and a small bracket overlapping the top of each bar, indicating the 95 percent confidence interval for that percent estimate. In cases where the confidence interval brackets on two bars do **not** overlap, one can assume that the difference between the estimates represented by the bars is a statistically significant difference. For example, in Figure 1, the confidence interval brackets on the bars for age groups 55-64 and 65+ do not overlap, meaning that the estimates of 21 percent and 9 percent are significantly different. In other words, the percent of persons age 65 and older who smoke is significantly lower than the percent for persons ages 55-64. The confidence interval brackets for age groups 18-24 and 25-34 do overlap, indicating that the difference between 30 and 31 percent may not be significant, and further testing is necessary to determine whether the difference is significant. Confidence intervals vary depending on the size of the sample as well as the magnitude of the estimate. (Confidence intervals are also included in the Reference Tables.)

Reference Tables

The Reference Tables display three columns of numbers:

1. *Percent estimates* are the proportion of Wisconsin adults estimated by the BRFS to participate in the specific behavior. For example, in Table R1, 27 percent of all Wisconsin men are estimated to be cigarette smokers.

2. *Confidence intervals* (C.I.) indicate a plus-or-minus (+/-) range around the percent estimate. A much stronger inference can be made using the confidence interval rather than the percent estimate alone. This is because, over all possible samples, the true value (e.g., the actual percent of smokers) would fall within the calculated confidence interval 95 out of 100 times. A confidence interval can also be referred to as the "margin of error."

3. *Estimated number* indicates the number of Wisconsin residents represented by the percent estimate in the first column. The estimate in Table R1--that 27 percent of males are smokers--means that about 501,000 Wisconsin men are estimated to be smokers.

It is important to consider confidence intervals before making statements about the differences in estimates between demographic groups. Apparent differences may not be statistically significant. We caution against labeling one estimate higher or lower than another unless the confidence intervals for the two estimates do not overlap. We did not conduct tests of statistical significance for this report.

The final two reference tables (R16 and R17) provide a description of the entire BRFS sample and of all women in the sample. These tables describe the entire Wisconsin adult population, as estimated by the BRFS. They also display the actual number of interviews conducted with Wisconsin adults (the sample size), tabulated by various characteristics.

Most of the variables reported here have very small levels of missing data. That is, the proportion of respondents who answered "don't know" or who refused to answer a specific question is generally less than 2 percent of all unweighted responses (fewer than 45 respondents). Larger proportions refused to answer the household income questions, which also affects the poverty status variable, as shown in Tables R16 and R17. Proportions of missing data are not shown for other variables. Slightly more than 2 percent of respondents did not answer the questions about body weight and about ever being tested for HIV.

Bivariate (two-way) analyses such as the tables and figures in this report sometimes raise as many questions as they answer. For example, the finding that widowed adults have low cigarette smoking rates raises an obvious question about the effect of age on this relationship. We know that widowed persons are older, on average, than other marital status groups. Thus the relationship between widowhood and smoking may simply reflect the relationship between age and smoking. The reader should be cautious in interpreting bivariate relationships, remembering that analysis with additional variables (such as age and sex) may be necessary for a full understanding of the relationship.

In addition, the reader should remember that an association between two variables (such as age and cigarette smoking) does not imply a cause-and-effect relationship.

Definitions

For each new topic in the report, the risk factor or preventive health measure is defined next to the pie graph at the top of the page. (The relevant definition is also shown at the bottom of each reference table.) These definitions contain information, in some cases, about how the survey questions were worded. For some of the survey items presented in this report, further information is presented below.

Chronic drinking status is derived from two survey questions: *During the past month, how many days per week or per month did you drink any alcoholic beverages, on the average? A drink is one can or bottle of beer, one glass of wine, one can or bottle of wine cooler, one cocktail, or one shot of liquor. On the days when you drank, about how many drinks did you drink on the average?*

Overweight is determined by asking, *About how much do you weigh without shoes?* and *About how tall are you without shoes?* Weight is converted to kilograms and height to meters, then the Body Mass Index (BMI) is calculated: weight divided by height squared. Men with a BMI of 27.8 or higher are considered overweight; women are overweight with a BMI of 27.3 or higher. (Overweight, though not a behavior *per se*, is thought to reflect behaviors such as dietary intake and activity patterns, and thus is usually considered a "behavioral risk factor.")

Sedentary activity pattern is determined by asking about the type of physical activity or exercise that respondent participated in during the past month (a maximum of two activities can be listed), usual distance covered (if walking, running, jogging, or swimming is the primary activity), times per week or month that respondent did the activity, and usual length of time spent doing the activity. The "Top Ten Exercises" table is based on the one activity each respondent spent the most time doing in the past month.

Inadequate fruit and vegetable consumption was based on a series of questions. Survey respondents were asked how often they consumed (1) fruit juices, (2) fruit, (3) green salad, (4) potatoes (excluding french fries and chips), (5) carrots, and (6) other vegetables (other than carrots, potatoes and salad). If the combined daily frequency for all of these was fewer than five, the respondent was considered to be consuming inadequate amounts of fruits and vegetables.

HIV and AIDS questions were asked only of respondents under age 65 (following CHC protocol). All respondents younger than 65 were asked, *Have you ever had your blood tested for HIV?* Those who said *Yes* were asked a series of follow-up questions: when the test occurred, the main reason for the test , and where it was done. Those who said they had never been tested for HIV were asked if they had donated blood since March 1985. (Since then, the United States blood supply has been routinely tested for HIV.) Information about this group of blood donors (whose blood was almost certainly tested as part of blood donation) is included only in Table 2; they are not included in the figures and tables about persons tested for HIV.

Self-reported risk of contracting HIV was determined by asking, *What are your chances of getting the AIDS virus? Would you say high, medium, low, or none?*

Demographic variables. Some of the demographic variables (such as age and sex) used to tabulate BRFS results are self-explanatory. Results tabulated by race are presented only for white non-Hispanic and black non-Hispanic respondents. The number of respondents who reported they are Hispanic, or of a race other than white or black, was too small to provide accurate results. The employment status "other" includes out-of-work persons, homemakers, students, retired persons, and persons unable to work.

Income and poverty status. Respondents were asked about their "annual household income." This information, along with the number of household residents, was used to approximate the federal poverty level for each household. A household of three persons with an income of less than $13,000 was considered to be poor, or below 100 percent of the poverty level. Because the household income categories in the BRFS are too broad to accurately classify every household, there is some error in the poverty status classifications. This variable should be used with caution.

Study Design

Sample design. The Wisconsin Behavioral Risk Factor Survey (BRFS) used a disproportionate stratified random sample design in 1996. The design specified 11 independent sample strata, each with a targeted number of completed interviews. Six of the strata consisted of entire counties or major portions of counties; one of the six was an oversample of black adults in the City of Milwaukee. For this special stratum, 26 telephone prefixes were selected in the City of Milwaukee which had, in the past, produced 20 percent black respondents or greater. The remaining five strata were groups of counties corresponding to the five regions used by the Department of Health and Family Services.

The sample was selected in two stages. First, households were randomly selected by means of randomly sampling telephone numbers within each stratum. Second, when the interviewer telephoned a sampled household, all adults living there were listed and one adult was randomly selected to be the respondent.

The sample was designed to produce a data set that would be representative of all Wisconsin adults living in households with telephones.

Survey questions. Many of the questions asked during the BRFS interview are designed by CDC, and are used in every participating state's survey. These questions remain fairly consistent from year to year. They cover a standard set of health-risking behaviors (cigarette smoking, alcohol consumption, lack of physical exercise, overweight, fruit and vegetable consumption, and safety-belt use) as well as use of preventive health care services (routine checkup; and screening for high blood pressure, elevated blood cholesterol, diabetes, breast cancer, cervical cancer, colon cancer and HIV infection) and health status (current physical and mental health). Additional questions are added each year to the Wisconsin BRFS to assist state agencies in estimating health behaviors important to their programmatic and planning efforts. Virtually all of the results presented in this report are based on the standard CDC questions.

Survey interviews. Telephone interviews were conducted every month throughout 1996. The average length of one interview was about 18 minutes. At the outset of each interview, the interviewer briefly explains the study, tells the selected respondent that participation is voluntary, and that all the information provided will be kept confidential. The respondent is never asked for last name or address; the only identifying information associated with each completed interview is the telephone number. At least ten attempts are made to contact each sampled telephone number. Call attempts are made seven days a week, during both daytime and evening hours.

The sample design called for 2,160 completed interviews. The contractor delivered a final data set with 2,231 completed interviews. The overall response rate for the 1996 BRFS was 69.6 percent. All sampling and interviewing was done by the survey contractor, the Wisconsin Survey Research Laboratory (WSRL), University of Wisconsin-Extension. All of the telephone interviewers have received extensive training, and their work is routinely monitored and reviewed.

Data set preparation. The contractor (WSRL) delivered cleaned data sets to CDC, where the data were further checked and data set weights were constructed. CDC delivered the final raw data set for calendar year 1996 to CHS, where the analytic data set was prepared with SAS software. This involved construction of variables for reporting results, and removal of the last four digits of the telephone number for purposes of maintaining confidentiality.

Weights

The final 1996 data set consists of 2,231 respondent records. When a weight is applied to each record, this data set produces an estimate of the total Wisconsin adult population, about 3.8 million persons. The demographic characteristics of the weighted sample are considered to be representative of Wisconsin's adult population. This population is not adjusted to omit persons living in households without telephones, nor for persons living in group quarters (nursing homes, prisons, dormitories, etc.), although the interviews are conducted only with persons in households with telephones.

The final weight on each record includes three components: (1) adjustments for the disproportionate stratum sampling rate and response rate; (2) adjustments for the number of adults and number of telephones within each household; and (3) a poststratification component that forces the weighted results to equal the estimated adult population. A contractor provides county-level population estimates to CDC for the male and female adult population in six age groups. These estimates are aggregated at the stratum level and used to construct the final weight component for each record. The total Wisconsin adult population for 1996 produced by the weight variable is 3,796,799.

Comparisons to Public Health Objectives and National Data

The final section presents BRFS estimates of progress toward selected Wisconsin public health objectives from *Healthier People in Wisconsin: A Public Health Agenda for the Year 2000.* As part of the same table, it also provides comparable data for Wisconsin and the nation, as computed by the CDC. Owing to a different method used by the CDC to calculate results, the CDC estimates for Wisconsin are slightly different from those presented in the body of the report. They are included here because they are directly comparable to the national results.

More Information from the BRFS

A brochure of 1996 Wisconsin BRFS results (titled *Health Counts in Wisconsin: Behavioral Risk Factors 1996*) and other reports from the Center for Health Statistics are available at the CHS Web site:
http://www.dhfs.state.wi.us/health_chs/

Interested parties can contact the Center for Health Statistics for more information about customized data analyses and access to the Wisconsin BRFS data set.

The Centers for Disease Control and Prevention also have some BRFS information for all states available on their Web site:
http://www.cdc.gov/nccdphp/brfss/